

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



THE MARYLAND FARMER:

DEVOTED TO
AGRICULTURE, HORTICULTURE,



LIVE STOCK
and RURAL ECONOMY.

Vol. XXII. BALTIMORE, NOVEMBER, 1885. No. II.

NOVEMBER THOUGHTS FOR FARMERS,

The poet sings of the cold and dreary days of November, but it to us has always been one of the pleasantest months of the year, and perhaps the more so because of our boyhood remembrances, when Indian Summer then seemed longer and more delightful than of late. Yet we have always the balmy, smoky days in this month when the sun seems too indolent to penetrate with fierceness the misty air, and when nature is coloring the leaves before they fall to the earth to rustle under the "rabbit's tread." No Tyrean robe was ever half so rich and lovely in colors as those nature bestows on the leaf before it droops from its parent tree. This is literally the close of the crop and fruiting of the year, and the month preparatory to going into winter quarters. The farmer now gathers in his corn and fodder and puts away his fruits and vegetables; secures a supply of winter fuel; builds sheds to house his sheep, hogs, young stock and breeding stock separated in comfortable winter quarters according to their several kinds and respective wants. He sees that his winter sown grain is protected against overflows from rain or sudden thaws of heavy snow, by water furrows that are well cleaned out and convenient to conduct all surplus water to open ditches or water flows; or should the field be flat and hard pan, it must be well underdrained by pipes at proper distances, for water in excess is death

to plants. Aeration, light, and water in proper quantity are the essentials to plant life. Let the farmers remember that this month especially, provision should be made by each one for the comforts, health and welfare of all his dependants whether man or beast. "A merciful man is merciful to his beast," has been well said and should be remembered not only because of the Christian charity it betokens but because such conduct consistently pursued puts money in the purse and gives to him who practices it, a comfortable feeling of having done his duty.

RESTORATIVE CROPS.

It is a fact to be regretted, but one none the less indisputable, that our agriculture does now suffer and has always suffered from the lack of a due interchange of restorative with exhaustive crops. That system of rotation which nature and long experience have taught to be the best adapted to preserving the fertility of the soil, has not been followed, except, perhaps, in a few rare and isolated cases, and by men looking to future good rather than present gain. There has, too generally, been an undue preponderance of cultivated crops, of bread crops, of tobacco or cotton—of the one thing, whatever it might be, that paid the best in immediate returns.

At the same time, it must be confessed also that due care was not taken to restore, at least occasionally, something to the soil to make up for the elements carried off in

the crop. Farming on a virgin soil, or one at first naturally productive, the temptation was great to overtax it, and to ignore any system of rotation that would rest and recuperate it. Hence it is that so much of the farming lands of the older states became so exhausted as not to return an increase adequate to the labor and capital expended upon them. To-day exhaustion rests upon the bosom of the land, and reaction, if it comes, will be like throwing off the incubus of some frightful dream, unpleasant and costly to the operator.

But wherever this exhaustive system has prevailed, whether in the pine barrens of the Southern States, the stony hills of New England, or the once rich soil of the great valley of the Father of Waters, the reaction must come. Some hand must begin the restorative process. Grass and root crops, soiling crops and green crops, must, alternately, with grain, tobacco, etc., occupy the land, in order that less may be taken from it annually, and something restored to replace the elements formerly abstracted. Root crops and grass fed upon the farm to animals that are housed at night, and the manure carefully saved and returned to the fields, go a great way in restoring the exhaustion produced by the crops of sale. Even corn, fed to stock upon the farm, may be put in the class of restorative crops, if due care be observed in saving the excreta of the animals fed upon it, and of returning the manure to the soil whence the crop was taken.

Great skill and judgment are to be exercised in rotating crops. It is not every soil that will bear the same rotation with equally good results, nor is the same always equally benefited by a repetition of the same process.

As a rule green crops or pasturage should follow grain, cotton, tobacco, and such crops as are grown chiefly for market. Root crops, such as turnips and both sorts of potatoes, should succeed corn, cotton, or

tobacco. They always leave the soil improved. Hoed crops should be followed by sowed crops, something to shade the soil, and restore nitrogen and a goodly amount of vegetable matter. By this method, a farm can be made to pay equally as well as one where everything is grown to sell. In fact, the best farms are those where it is always a rule to plant equally of restorative with exhaustive crops, and it is by this process alone that fertility is to be maintained.

CABBAGE CULTURE SOUTH.

Are the days of cabbage culture at the South numbered? Are we, even in good old Virginia, mild tempered and sober-climed as she usually is, to have no more solid headed and savory Winningstadt or Wakefield, Drumhead or Savoy, or other variety of the cabbage kind for our summer and autumn dinners? Or, if perchance, a centum of the plants that arrive at mature age should manage to develop a tolerably solid globe of leaves, shall we ever be able again to secure one, even one, that the worm (disgusting and brazen-faced robber) does not at first levy upon for a share, and generally a very large share of the best and choicest parts?

We have tried our best for years, on almost every kind of soil and with nearly every kind named on the catalogues, and the more we try and the harder we work for a cabbage or two fit to eat, the worse it gets. This year of all the years of our experience caps the climax for bad luck. We have hardly had one respectable cabbage head the whole summer through.

Our seeds purport to come from some of the most reliable growers in the country, but the seeds either do not know it or do not consider how important it is for them to keep up the reputation of their respective houses, and so do not cabbage worth a straw. This year it has been worse than ever. Our cabbage, and cabbage quite generally throughout our section, did not head. Scarcely one in fifty would form a solid ball. Was it the fault of the seed? or the mode of cultivation? or the soil? Something certainly was at fault.

The refusal to head was bad enough, to be sure. But the conduct of the *Pierces*

rapae was simply execrable, intolerable. How shall we endure it, or cure it? We are seeking light and consolation; and if happily, any one in this broad land can help us, even in time for the next crop, we shall be under ten thousand obligations, and will vow a vow to send them (V. D.) the biggest head of cabbage we make. Now get down your quills, brother Hoe Handle, and do tell us what the matter is.

Seriously, cabbage have behaved very badly in all this region of country this year, and we want the seed growers to know it, for we are by no means sure that a part of the trouble does not lie at their doors. We are willing to take a share of the fault upon ourselves, will admit that perhaps we do not fertilize rightly in every case, or that we plant the same ground too often, or that our cultivation is sometimes wrong. But it was not so bad a few years ago. We cannot shoulder all the blame.

As for the insects, they were never more numerous or more voracious than they have been this year. They began early and they stay late, and they are iron clad to boot; that is, they bid defiance to all the usual remedies. *Pieris* has recruited with two or three worse looking fellows than himself, and they seem to think it is their destiny to work on shares with the gardener—they take the cabbage and leave him the stalk. "Is there no balm in Gilead, is there no physician there?—to rid us of these worms.

Va.

B. W. JONES.

MANAGEMENT OF AGRICULTURAL FAIRS.

Twice during the present volume we have had occasion to make extended remarks on this subject in connection with gambling booths, obscene side shows and kindred exhibitions licensed by those in charge. While we have been disgusted by their continuance in many quarters, we have been greatly pleased to see a decided stand taken in several cases on the right side. One of the Virginia County Fairs not only refused to license these things; but even refused to sell tickets to those who wished the privilege of establishing them, thus excluding the parties from the grounds entirely. It will also be seen from

the following taken from the *Baltimore American* that the Cecil County Fair at a sacrifice has placed itself in the front rank of those advocating this reform.

"Yesterday the grounds of the Cecil County Society were full of gamblers and sharks of all kinds, who, under pretence of having something to sell or something to show, were running wheels of fortune, throwing dice, and gambling by means of every conceivable device known to the brotherhood. This morning the managers, much to their credit, and at a loss of fully five hundred dollars, returned to them the money they had paid for their privileges, and banished the whole fraternity from the grounds. This was certainly a very praiseworthy action, when it is considered that, owing to the inclemency of the weather, the fair will result in pecuniary loss instead of gain. In order to pay the deficiency incurred by the loss on the spring fair, and all current expenses and premiums, and the interest on the debt, the most careful estimate makes it necessary to take in \$12,500. The officers and managers are, therefore, anxious that an enlightened and deserving public will favor them with a liberal attendance on Friday and Saturday."

Let every farmer within reach of the Cecil County Fair who loves the welfare of his family, and the good conduct of the rising generation, put his shoulder to the wheel, to help this Cecil County Organization to a well merited success. Give to them a moral and pecuniary support so that there need be no danger of a relapse. The temptation of money is always great; but the support of the farming community should leave no room for such temptation in the future. All hail! Managers of the Cecil County Agricultural Fair, all hail!

A PLOWMAN says there are several easy ways to prevent rusting of plows and cultivators and to keep the teeth bright. One is to give them a coat of thick limewash, as soon as they are brought in from the field. Another is to dissolve an ounce of resin in four ounces of linseed oil, and while hot mix this with a quart of kerosine, and stir well. This is laid on to the smooth iron with a paint brush. Another way is to dissolve an ounce of camphor in some turpentine and add to this four ounces of pulverized black lead or stove polish, and mix well. This may be rubbed on with a rag. To remove rust from plows or tools nothing is better than a mixture of half a pint

of oil of vitriol poured slowly into a quart of water, and apply this to the rusted metal. Wash off with water.—*Rural Messenger*.

PREPARING TREES FOR WINTER.

Trees need a little care in autumn more than at any other season of the year, perhaps. I have always observed that trees receive pretty much all the care they do receive in the spring. This season seems to develop a spirit of thrift and enterprise that frequently extends to the orchard. When the time comes, the farmer thinks he must do something to atone for past neglect. He sallies fourth with the saw and axe, and makes sad havoc for a time. The wilderness of boughs that have sapped the fertility from his land the year before, he now cuts out and burns. He takes off limbs with the saw that should have been taken off years before with the knife, which shows that he has been growing wood instead of fruit. He probably cuts out the best of the fruit limbs for that season, and the sadly mutilated trees are again left to their own ways for a term of years, perhaps. Hardly a thought is given them during the long summer season, and the only care that they receive in autumn is the harvesting of what little fruit they may produce. They are allowed to send fourth another growth of wood that will have to be cut away at some future time. It is a mass of tender, watery shoots on a tree that causes winter killing in many cases. When these are killed the remainder of the tree is often affected. A tree ought not to be forced to carry any unnecessary top through the winter. Late summer or early autumn pruning is an excellent thing for the orchard.

Cut back the small twigs, that will ultimately need removing, early enough in autumn that the cut portion will have time to heal over before winter sets in. It may seem like a great job to prune while the leaves are on, but it does not take much longer, after one gets at it, than it would to prune in spring. One can see just what the top needs in the way of pruning while it is in full leaf. It should certainly be given in preparation for winter.

Another important item in preparing trees for winter is that of mulching. Nature mulches her trees until we take them out of her hands and set them in the open, wind-swept field, where their natural mulch-

ing cannot accumulate as in the forest, where each protects the other. If natural provision in this line is prevented, it is plain that we must resort to artificial means to protect our trees. We must usurp the functions of nature.

Partially rotted manure, muck, or even earth, will do for mulching. If coarse mulching has been put about the trees in spring, as it certainly ought, it will now be sufficiently rotted to be safely allowed to remain through the winter. A little more may be added to it if necessary. In mulching with fertilizing materials in this way, two purposes are served—the surface roots are protected, and the soil replenished in plant food.—*Farmers' Call*.

KEEPING THE LAND IN CROPS.

Autumn cultivation, says the *Daily Telegraph* of London, is rightly considered to lie at the foundation of good farming, the reason being that arable land is kept cleaner with less cost where it is scrupulously adopted, and the early tillage affords opportunity for putting in a large number of winter green crops, instead of allowing it to remain fallow until spring. Popular opinion seems to favor this kind of cropping more and more. Farmers of the last generation often omitted to sow rye, winter barley, vetches, and trifolium for spring and early summer feeding, from the mistaken idea that rapid cropping punishes the land too much. The fact is now seen and tolerably well understood, that if only sufficient fertility be supplied and the soil be kept clean, it is simply impossible to make too great demands on production. As the market gardener, as soon as he has marketed one kind of produce, sows for another, so the farmer who embarks in legitimate high cultivation aims to keep every acre of his holding actively producing. Science as well as common sense proves that he is in the right. Sir J. B. Lawes has recently pointed out that the nitrates absorbed from the soil by rains are speedily washed out again unless there be roots of young plants to take them up. Hence the importance of attempting to clothe almost every acre of stubble land, with young green plants, calculated to yield valuable stock fodder in April, May, and June that throughout the whole intervening growth-period from October, this great

gain to the farm may accrue in an extensive absorbing of nitrates from the atmosphere by the roots of plants, derived from rainfall and dews. What has of late tended to make these winter green crops more popular than ever has been the success of the ensilage system, and the fact that the farmer who adopts the latter can not possibly have too much of the former. When the rye, vetches, and trifolium have got well nigh to perfection in the spring and early summer months, if there be ample silo accommodation, they can be cut and cleared off the ground immediately, so that the land may be resown to turnips, planted to cabbage, or devoted to green maize for a second silo crop. Farmers of the past did not grow so many catch crops as their successors do now, because they did not always know what to do with them when grown. In the months of May and June, when there is plenty of grass, the consumption of such produce by live stock in a green state, although making the best possible use of it, is somewhat limited. It was all very well in the old days to have a few acres of rye, winter barley, vetches, and trifolium, to come successively, ready for consumption, but it was not worth while cultivating any of these crops in a very extended degree.

PAINTING.

All the materials for paints are now cheap. The lead, the oils and the colors are all as low now as they have been at any time during several years past. As cold weather approaches, and the insects disappear, wherever paint will be a benefit, it should be used. Dwellings should be cleansed by it inside and outside; for it is much better than white-wash in appearance and reality. It is always good economy to get a gallon of paint and cover the woodwork of all agricultural implements as they are stowed away for the winter, also, wagon bodies are none the worse for a little attention in this direction. On those parts of buildings with which we seldom come in contact, two or three coats of petroleum followed by a coat of paint will be an excellent preservative and repay

fourfold the time and expense. The cheap mineral paints are all that are needed in this treatment, mixed with oil. At liesure times, in cold weather, it is always economy to paint.

TERRIFIC FORCE OF THE JUDSON DYNAMITE.

EDITOR MD. FARMER.

Frequent inquiries have been made regarding the success of this agent in blasting stumps and trees, and with the view of having some large trees and stumps removed, I have had the experiment made. It may interest some of your readers to know the result of two blasts, the heavy rain preventing a more extensive experiment.

The first one was with an old apple tree nearly three feet in diameter. A hole was bored under it with a two inch auger until about the center was reached, and the dynamite was placed at the bottom. A fuse with a copper cap was attached which was inserted in the powder. The explosion of this cap producing a concussion breaks up the molecules of the powder and instantly a complete resolution of the chemical compound takes place, and the sudden expansion does the work. The action is very different from common gunpowder. As all know, with gunpowder the explosion is due to the rapid combustion of the carbon or charcoal of the powder, as well as the setting free of the nitrogen of the salt petre, the action of which suddenly burns up the charcoal. As there is no combustion of the carbon in the dynamite there is no nitre used. If water could be as quickly changed into its elements, hydrogen and oxygen, the result would be the same. In the experiments with the dynamite, the slow burning of the fuse allows one to reach a safe distance from the explosion. In the case of the apple tree treated as mentioned, the whole body of the tree was lifted up, roots and all, and completely shattered, leaving a hole large enough to bury a small house; which, when filled, would have admitted being plowed over at once. The second blast was under a large cherry tree two and a half feet in diameter, owing to a hollow in the tree admitting the escape of the gas, the destruction was not so com-

plete; yet it was blown out lifting the immense roots above the ground.

The next experiments will be with large white oak stumps, and the result will be reported with the particulars about the cost, etc. The agent of this powder has an office in Baltimore, and says there is a great demand for it for the purpose of blowing up stumps by the rail road companies. The confining of the powder was done by gently ramming clay or earth over it; the force of the explosion not needing to be confined like common powder. Circulars with full directions are furnished by the agent.

Rock Hall.

A. P. S.

DAMP CELLARS.

Here is the house in which I am to live. The first question that occurs to me as I cross the threshold with my family is: Are the conditions here conducive to health or disease? I shall go at once to the cellar. Two things, I know, are imperatively demanded there. One is, that it shall be absolutely free from all dampness; and the other, that it shall be scrupulously clean. No care in the upper part of the dwelling, no precautions taken there, can free me from constant vigilance here. Suppose my cellar is a dark, ill ventilated hole, what follows? Silently, by day and by night, the moisture creeps up the walls, pervades the whole atmosphere of the house, enters every closet and sleeping apartment, and soon the physician is called; the family is ever being troubled with sore throats, rheumatism appears, and meanwhile we wonder what the matter can be. Now add to dampness filth, decaying vegetables, accumulating rubbish, then diphtheria and fevers follow, and at last death comes, and consolation is sought in the mysteries of Divine Providence. Ah! the burdens of human sin and neglect that are laid upon the shoulders of the Almighty, for which he is in no wise responsible! I remember a story, told, I think, by Mr. Beecher, very appropriate just here. A certain family was suddenly smitten with disease; one after another died; the mysteries of Divine Providence were dwelt upon at great length by the kindly pastor, and much comfort found in the thought that God has brought all this sorrow and loss. "Subsequent investigation in the cellar," said Mr. Beecher,

"showed that it was not Divine Providence at all, only rotten cabbages!" Now let no one say that he has lived over a damp cellar for years and suffered no harm. He cannot tell what day the consequences of such utter disregard of sanitary requirements may make themselves felt; sooner or later he will recognize them.—F. H. Rowley, in *Good Housekeeping*.

CUBAN TOBACCO DETERIORATING.

We have long been of the opinion that many of the cigars sold as Havana have never seen a particle of the Cuban leaf; but have received all their stock from Connecticut, Virginia, Pennsylvania, or other tobacco states. For some time back, the best tobacco from our Maryland fields has been rated as fully equal to the great body of that imported from Cuba; this, too, by those who have handled both extensively. To confirm us in this view comes the recent report of Consul General Crave on this subject. He says:

Cuban tobacco has lost its prestige through forcing and artificial manures, and has to sustain sharp competition from abroad, where it formerly commanded the market, and I believe that some years must elapse before the soil can recover from its excessive and indiscriminate use of artificial fertilizers. A few years ago the leaf harvested in the Vuelta Abajo was not sufficient to meet the large demand, and in order to increase the yield, growers made use of guanos of all sorts, and with such bad results that they now find it difficult to place on reasonable terms more than half, and sometimes less, of their crops at low prices. In a few localities only the soil has not been spoiled by spurious manures, and the leaf grown there commands very high prices and is warmly competed for by local manufacturers and buyers for the United States. Notwithstanding the last crop has been of better quality than heretofore, growers were compelled to abandon the tobacco cultivation for a certain time and devote the ground to other purposes. It appears that this change of cultivation is absorbing the fertilizers and restoring to the soil its former good qualities, and if one can judge from the splendid appearance of the leaf and the ready sale it now meets with, it would seem that the Vuelta Abajo fields are regaining their former renown.

The quality of tobacco, like other agricultural produce, depends on seasons, soil and many natural causes which may baffle the most careful cultivator.

There has been no really fine-flavored aromatic leaf harvested since 1881. Much of that since garnered has been simply bad. Great hopes are entertained of the coming 1885 crop, and present indications are in favor of this assumption.

AGRICULTURE IN GEORGIA.

Probably no state in the Union is doing more for the cause of agriculture than Georgia. She has a department of agriculture under the efficient management of Hon. J. T. Henderson, commissioner. In the organization of this department, which comprises a general oversight of all agricultural interests, and provides for the examination of commercial fertilizers, providing for soil tests etc., considerable expense is incurred, but at the same time the analyses of commercial fertilizers is made a source of revenue to the State, which amounts to a very handsome sum. This plan might very properly be adopted by other states, and with a balance largely in favor of the agricultural department, there would be much less opposition to the appropriations that are annually asked for. The appropriation annually made in the state of Georgia is \$10,000, but the fees for fertilizer analyses have averaged about \$75,000 per year, whereby a balance of \$65,000 remains in the treasury. It has been the aim of the Georgia commissioner to aid so far as may be the agricultural education of the people of the state, by the publication of convenient hand-books upon the different branches of farm industry, under the general title of manual. These have consisted of a scientific manual, giving an outline of chemical science as applied to agriculture, manual of cattle, manual of the hog, manual of poultry, and a manual of Georgia. A crop bulletin is also issued each month, a pamphlet of fertilizer analysis, another of soil tests and experiments, etc. During the present year, in addition to the crop reports and other information contained in the monthly bulletins, there has been printed a translation of professor Ville's lectures on agriculture. These are largely circulated, and must exert a beneficial influence in the cause of agriculture. In her efforts to educate the farmers of the state in all that is of advantage to them, and to protect them from the frauds of fertilizer dealers, Georgia is behind no state in the Union.—W. H. Y. in *Boston Globe*.

GERMAN POTATOES IN NEW YORK.

No Bigger than Walnuts and Sold at the Rate of 5 Cents a Pound.

It may seem incredible to some of our readers to learn that potatoes are imported from Germany into this country, than which no other portion of the globe has more agricultural advantages, but such is the case. Whether the potato grown in German soil possesses any particular virtue not inherent in the American grown tuber, is a question we are not able to answer, but we do know that certain classes of people, the world over, deem imported foods of every sort far superior to home products. In England and France, for instance, the label of an American house claims the first consideration of the epicure in search of something extra nice, and from our foreign correspondents and personal observation we learn that everywhere in Europe American goods are found on sale in immense quantities. On the other hand, it seems perfectly natural, when we consider this vagary of human nature, to find German potatoes, and a thousand other articles we might name, in the New York markets, with plenty of purchasers in the bargain.

The particular German potato we have in mind has only lately gained a prominent place in our list of exports. A Few years ago the receipts were from 25 to 50 bags yearly. Last year over 1,000 bags of German potatoes were sold in New York city alone, and this season the sales have already reached this figure, showing a remarkable rapid increase in their consumption. Noticing this increase and desiring to find out the cause of their popularity, we called upon an up-town grocer, who serves a very particular class of trade, and asked to see his German potatoes. He displayed his samples upon a plate which held a dozen or more tubers the size of a large walnut. We were surprised to learn that this was the average size, and that in spite of the seeming disadvantage in this respect, the German potato was a favorite on the tables of several of his wealthier customers. He sells them by weight, at five cents a pound, and buys them at three cents by the single bag, or 2½ cents a pound in ten bag lots. The bags will average about 100 pounds. Regarding the demand, he informed us that at present his sales are one bag a week,

but during the winter season from three to five bags. Curious to know whether they were bought for any special object, we were informed that they were considered the finest potatoes for salad, and are principally used for that purpose. Peeled and broiled in lard or butter, whole, without slicing, they make a specially attractive dish. Boiled and served in their peel, and eaten with a little butter and salt, they are delightful. Cooked this way, the potato should be broken apart with the hand, and not cut with a knife.—*Metropolitan Grocer*.

KENTUCKY BLUE GRASS.

(*Poa Pretensis*.)

Probably no section of the world is more famous for its pastures than the blue grass region of Kentucky, and many a horse reared upon these fertile meadows has received the admiration of thousands for the combined qualities of speed, beauty and endurance. The grass which forms the basis of these great pasture grounds is so well known over a large portion of the United States.

That few grasses are so well known is evidenced by the popular names, green meadow grass, June grass, common spear grass, and others which have been applied to it. This is one of the earliest of our grasses, with a perennial creeping root, erect, smooth, and round stems, with linear, flat leaves, and a spreading, erect panicle. In color the plant is a light green, the spikelets often have a tinge of brownish purple. As before stated, it is especially valuable for pasture, being much relished by stock. For hay it needs to be cut at time of flowering, as afterward it soon dries up. As a lawn grass it is most desirable, its fine herbage making an elegant turf. An eminent cattle breeder, writing many years ago of the value of this species, said: "Whoever has limestone land has blue grass; whoever has blue grass has the basis of all agricultural prosperity; and that man, if he have not the finest horses, cattle and sheep, has no one to blame but himself."—*Prairie Farm*.

A WELL KNOWN CLASS.

We have read with a good degree of enjoyment the following graphic description of a class of agriculturists, which are not so very scarce in other quarters than Honesdale. We believe our readers will also enjoy it, and we gladly credit it to the *New York Sun*, in which we find many readable items, besides the news.

Honesdale, Pa., Oct. 4.—A friend of mine runs a newspaper up here among the patient and long suffering farmers of northern Pennsylvania. Not having had a vacation for a number of years, he was tickled almost to death a few weeks ago when he woke up one morning, and found himself sick abed and unable to go to work. So I came up to keep his readers enlightened on the state of the country and the price of pork until he got around again. One day last week the foreman of the printing office notified me that he was going to a picnic the next day, and that I wanted to hustle around and raise him twelve shillings or there'd be trouble. I made out a heap of bills against delinquent subscribers, and started out to raise the foreman's picnic money. The first delinquent that loomed up was an old farmer patron of my friend's paper. He looked downcast and solemn. As all our advices had been that crops were more than good this season; that fruit trees were actually breaking down under their autumn burdens; that, in fact, field, garden, and orchard had never been more bountiful in their returns to the tiller of the soil. I was at a loss to know how to account for the gloom and sadness that seemed to set heavy on the honest agriculturist's breast.

"Is there any one sick at your house, neighbor?" I inquired.

"Not's I knows on," he replied.

"Haven't lost any friends, have you?"

"Hain't heered o' none."

Thus satisfied that no domestic affliction was the cause of his melancholy, I felt easy in assuring him, in behalf of my friend the editor, that the little bill he owed for three years' subscription to the *Clarion Gong of Liberty* would never come at a more acceptable time than just then.

"Gosh!" said he, and his sadness deepened. "Don't come a stickin' no bill, these times, to any one that's tryin' to live by

KNOW THYSELF by reading the "Science of Life," the best medical work ever published, for young and middle-aged men.

farmin'. I don't know what we up-country farmers is comin' to. We plow an' we sow, an' we plant an' we hoe; but when it comes to the reapin' an' harvestin' an' pullin' an' diggin' o' what we plowed an' planted an' hoed fur, we most giner'ly have our labor fur our pains. There hain't no fruit this year, no hay, no oats, no rutybagies, no nothin'."

The melancholy of the honest old farmer was touching. I sympathised with him, and asked him how about the hay, oats, rutabagas, and things.

"Well," said he, "in the first place, the beginnin' o' the season was too dry fur grass, an' we went too cuttin' what had managed to grow, th' come on such a wet spell that a heap on it was spiled. Then the wet spell dropped down jist in time to to rust all the oats, an as for buckwhit, jist ez it had tuckered through all the bad spells o' weather we had, vlong come frost right in time to knock it higher'n Gilderov's kite. Ez fur pastur, we hadn't no early pastur', owin' to the droughth, an, the wet weather fetchen on the fall pastur' too late to help us out. Then corn got old too fast, and enched us on sellin' roastin' ears fur market, an' if thuz twenty bushels o' 'taters in the hull blame county that'll keep till Thanksgivin', I'll pay \$2 a bushel for 'em, that is, pervidin' I kin make any one b'lieve that my farm's wnth mortgagin' fur that much money, so's I kin raise the spondulix to pay fur 'em. If ye ast about rootybagies, I kin tell ye that they'm goners fur good. The sloshin' rains we had made the weeds grow faster'n hop yeast kin raise a settin' o' bread, an' they've jist choked the rootybagies deader'n a fried codfish ball, an' them that 'scaped the weeds has been eat up by a bug that likes 'em better'n a 'skeeter like to bite fat babies. Thuz a worm that eats them bugs faster than the bugs kin eat rutybagies; but jist to show ye how ev'rythin' goes agin us farmers, I'll be blamed if thuz any o' them worms this year! I tell ye th' hain't no fruit this year; no hay, no oats, no rootybagies, no nothin'! Don't ast me to pay no bill, fur its more'n likely that some one'll be 'round with a 'scription paper 'fore winter comes, to ast ye to help keep me an' a lot more o' snfferin' farmers out o' the poorhouse!"

I felt sorry for the poor old farmer, and I didn't press the claim; and when I heard

him soon afterward make a bargain with a shipping merchant to deliver him five hundred bushels of choice apples, a carload or two of potatoes, all the buckwheat he wanted, and oats by the ton, I wondered where the unfortunate farmer could possibly manage to obtain the goods to deliver, there being no fruit this year; no hay, no oats, no rutybagies, no nothin'!

ED. MOTT.

MARYLAND AND DELAWARE SHIP CANAL.

At a meeting of the American Agricultural Association, held in Chicago in 1882, we introduced this subject to the notice of our people, in a paper prepared and read before that body. In that paper we set forth many arguments in favor of the construction of such a canal; showing that the distance for transporting grain from the West and North West is fully 100 miles less to Baltimore than to any other seaboard city, and thence by the proposed canal 200 additional miles are saved to foreign ports. We there advocated a free canal by the general government; but so many interests were involved, to offset such an undertaking, that no bill for that purpose could find its way through congress. We have been hopeful that such a canal would be built by the Government; but in the failure of Congress to make appropriation, we will not hesitate to accept such benefit as we are sure will result, even when the canal is carried through by private capitalists. The interest we have always taken in this truly great work has been revived by the following item we find in one of our exchanges.

A Wilmington (Del.) dispatch to the *New York Times* says: "In the Orphans' Court, Saturday morning, Judge Whiteley granted the application of the Maryland and Delaware Ship Canal asking for a commission to condemn and set aside certain land in the lower part of this county for its use and to make an award of damages to the owners. This application, as well as previous ones, was strenuously opposed by the able counsel representing the land owners who oppose the canal by reason of its probable financial injury to the Dele-

ware and Chesapeake Canal. After granting the application the court named the commission, consisting of New Castle county farmers, and instructed them to view the properties through which the company asks a right of way, and to make a return to the court as early as possible. There are eight questions to which the commissioners' attention is directed. Five arise from the fact of the company and the property-owners not being able to agree upon a price, and three arise by reason of the land being held by minors or being entailed.

"The favorable action of the court today removes the last obstacle to the construction of the canal, and the important work will be started as soon as matter of right of way has been disposed of, which will be within sixty days at most. Through Maryland the way has all been procured, and the same privileges have been obtained for the fifteen miles in this State, except in the eight cases to be settled by the commission. What is known as Sassafra route has been adopted, the terminal points being the Sassafra river, which empties into the Chesapeake bay, and Leston's Point, near Collins Beach, on the Delaware bay. The water belt is to be seventeen miles long, fifteen miles of its course being in Delaware, directly across the peninsula. It will be one hundred feet wide and twenty seven feet deep at low water.

"This canal will shorten the route between New York and Baltimore by sea 225 miles, and Baltimore and European ports via the ship-canal and Delaware bay 250 miles. It will obviate the dangerous and tedious doubling of Cape Charles. There are various estimates as to the time required to complete the work, which will probably take from three to five years. The firm of Ferguson and Fairchild, New York, have the contract for the entire construction, and state that owing to the improvement in excavating machinery it can be finished for less than \$8,000,000. The company is composed of New York, Philadelphia and Baltimore capitalists, and it is believed that Jay Gould is a heavy shareholder, as he was one of the original projectors of the enterprise."

Subscribe for the MARYLAND FARMER! only one dollar a year with a valuable premium.

THE NO-FENCE LAW.

We have to acknowledge that at one time we seriously doubted the benefits asserted for the No-fence Law. For a long time we thought it would either prove impracticable, or would be the cause of constant ill feeling among neighbors, or lead to endless law suits on account of trespass and damage. But all these doubts have been swept away and we are heartily in favor of the law, and hope it may become universal. In this connection we place on record the extracts below from the *Savannah News*:

"The local option stock law appears to be working splendidly in counties in which it has been adopted. The intense opposition to it, which was at first so conspicuous among owners of small farms and laborers, has almost entirely died out, and in a very few, if any, of the counties could the old law be put again in operation, if the question of reverting to the old system was left to a vote of those who were formerly 'fence' men.

"One thing very noticeable in the no-fence counties is the great improvement in cattle. The old piney woods cows are being replaced with blooded Jerseys and Alderneys and Durhams, and the cattle are almost invariably in better condition than ever before known. While the number of cattle has in some instances been reduced, the aggregate value has been increased. Many of the towns in the counties in which Northern butter was extensively sold are now stocked with home-made butter, and ship considerable quantities of it to other cities.

"People in the 'fence' counties have only to visit the 'no-fence' counties and make honest investigations to be aroused to the sense of the folly of maintaining \$1000 worth of fencing to keep \$100 worth of stock out of their fields."

In South Carolina this no fence law has worked like a charm. We believe it now applies in all the counties of that State. The opposition to the law, at first, was very great, but the practical operation of the law has given such good results that all opposition has entirely died out, if we are not misinformed as to the real facts. The no-

fence plan has given general satisfaction, we believe, in almost every section, in different States, where it has been given a fair trial.

OCTOBER REPORT.

Department of Agriculture, October 10, 1885.

FARMERS AND LAW SUITS.

We have never yet advised a farmer to commence a lawsuit. We believe it best for farmers to keep as far away as possible from all meddling with law and courts. It is better to suffer a loss, than to add the bitterness of hate, and the trouble and care of attending court, and the feeing of lawyers, and the paying of innumerable costs, to the first loss. On this account it is often said "the first loss is the least loss."

We hope every one of our farmer subscribers will read, reflect upon, and profit by the great Jones county calf case.

Waterloo, Ia., Oct. 7.—The law suit known as the "Jones County Calf Case" has been concluded. It was an action brought by Robert Johnson against D. V. Miller and six others for \$10,000 for malicious persecution. Eleven years ago John Foreman of Jones county had four calves stolen, and about the same time Robert Johnson a neighboring farmer, bought some calves for S. D. Potter of Green county. These calves proved to be the ones stolen from Foreman. Soon after Johnson was prosecuted by the Anti Horse Thief Association for the theft of the calves. He was tried twice and acquitted, and in 1877 brought suit for damages. The case has been before the courts ever since, and has been tried five times, and each time except one the plaintiff received a verdict of from \$3,000 to \$7,000, but the verdicts were set aside. The jury yesterday awarded \$7,000. The costs, attorneys' fees, and expenses entailed upon all parties to the litigation is estimated at over \$20,000, and several prosperous farmers have been rendered bankrupt. The calves were not worth over \$50.

A good full breakfast, hot and fresh, will be quite as well appreciated in the well-ordered hennery as it is at our own tables by ourselves. By all means, let your fowls enjoy *one* cooked meal daily.

CONDITION AND YIELD OF WHEAT.

The present returns of wheat are estimates by counties of the yield per acre, as far as can be ascertained by the results of thrashing. The yields are given on the basis of the area harvested, without reference to the breadth sown, *i. e.*, excluding that portion of the acreage which, in several States, was plowed up and put in other crops. That remaining, whether yielding 1 bushel or 20 per acre, is counted as the actual wheat area.

The last winter was the most destructive of wheat since that of 1866. That of 1881 was not so bad, as the portion utterly destroyed or so nearly a total destruction that other crops were substituted for it, was much less then. The worst part of the breadth was so generally given up that the remainder will average quite as well as the crop of 1881, which made a yield of 10.2 bushels, the smallest ever reported. The present average is about 10.5. It would have been 9 on the area planted, and not much over 9.5 if as large a portion of the area sown had been counted as in 1881. The area harvested is not precisely determined, but will probably not much exceed 34,000,000 acres. The States averaging 4 to 6 bushels are Virginia, the Carolinas, Georgia, Alabama, Mississippi, Tennessee, West Virginia, and Kentucky. Missouri returns 8 bushels and Ohio 8.1; Illinois, 9.2; California, 9.5; Pennsylvania, 10; Indiana, 10.8; Iowa, 11.2; Minnesota and Maryland, 11.5; Wisconsin, 11.9. Texas reports 12.5, with a large area; New York and Oregon, 15.5; Michigan, 20, and Colorado, Montana, Utah and Washington, 21 to 23 bushels.

OATS.

The average yield of the oat crop, according to the estimates of county reports, will average 27 to 28 bushels per acre. The largest yields are in Colorado, Washington, Dakota, Nebraska, Montana, Utah, and Michigan, from 41 down to 35 bushels per acre. The lowest, 7 bushels, in South Carolina; 30 to 35 bushels are averages of the Ohio Valley States. The range in the Eastern States is from 28 to 34 bushels. A large area was sown in many cases after

the plowing up of winter grain, and the product will therefore be the largest ever produced, exceeding 600,000,000 bushels.

BARLEY.

A fair product has been secured, apparently averaging 22 bushels per acre. The New York average, as reported, is 22; that of Michigan, 27; Wisconsin, 26.5; Minnesota, 23.8; Iowa, 23; California, 18; Oregon, 20.

RYE.

This crop, like wheat, will be a small one. The yield per acre is about the same as that of wheat. In the West the yield is somewhat better than that of wheat; in the Eastern and Middle States it is scarcely as good. It is often put in lands of poor or medium quality, and its breadth is not extending.

BUCKWHEAT.

The buckwheat crop is still in good condition generally, notwithstanding frosts in Minnesota, which have reduced the average to 53. The Michigan average is 69; in Wisconsin, 78; in the Eastern and Middle States the range is from 93 in Vermont to 100 in Rhode Island and New Jersey. The crop is practically unknown in the South. It will prove a medium crop. The States of principal production are New York and Pennsylvania, which average 95 and 93, respectively. The general average is 92.

CORN.

The corn crop is made, with very little injury from frost, and with a yield slightly above an average. The general average of condition is the same as last month, 95, a figure not attained since 1879. The yield per acre will be returned next month, but present indications point to fully 26½ bushels per acre throughout the country. Nebraska stands highest. Only Wisconsin, Minnesota, Kansas, Virginia, North Carolina, Arkansas, and the Pacific coast fall below 90.

The amount of soft corn will be small. A former investigation showed that in the average of a series of years one-fifth of the corn is unmerchantable, and two-fifths in bad seasons. There is scarcely a mention of frost except on the northern border—a small injury in Maine, in Vermont, in Wisconsin, Minnesota, and Dakota. Most of the frosts referred to were early, in the last of August or first of September, and

were generally slight. The crop as a whole is not appreciably affected.

COTTON.

The high condition of cotton in June and July was not maintained in August and September. Severe storms and excessive rains have prevailed; rust has destroyed the foliage, and worms have injured the fruit worse than for several years.

POTATOES.

The condition of potatoes has seriously declined on account of the prevalence of rot in New York and Wisconsin and elsewhere. The decline from the 1st of September was 11 points. The average of condition last month was 93; of the present investigation, 82. It is possible that the disease, which spreads rapidly when once in progress, may involve a wider area and more serious loss to be reported in November.

SWEET POTATOES.

The reports on this crop are, in general, very favorable. In a few counties in Georgia, Florida, Alabama, and Mississippi they are reported as suffering from an excess of rain, but in a larger number of localities in these States the abundant supply of moisture has been a favorable condition, causing exceptionally large crops.

CANADA THISTLES.

The following is from a correspondent of the *Husbandman*: Having fought them forty to fifty years on the same farm, and seeing them steadily increase during all that time the writer has reached the following facts and conclusions:

1. Though fallowing through an entire season, will not wholly eradicate them from deep damp muck soils, and on different soils where better work is done by fallowing there will always remain enough of them entrenched on the borders, along water-courses, and under fences to assure the re-stocking of the field in a few years with this bane of the farm. The ordinary cultivation that is given to hoed crops has been found ineffectual to suppress them, and they even increase year by year in a well-cared-for garden. Verily "Thorns and thistles," particularly the latter, does the earth bring forth.

2. Their propagation is chiefly from the root rather than from the seed, and

hence but little advantage would be gained were the existing statute imposing penalties for permitting thistles to perfect their seeds vigorously enforced, as it notoriously is not.

3. *A Canada thistle was never killed by mowing.* As well talk of killing clover by mowing it off during the autumn of the same year it was sown in the spring. Like clover, the thistle is a biennial plant? It makes its appearance one year, and, left undisturbed, matures its seed and dies the next season. While this process is going on it is also providing from its roots, not only for its succession, but for a general multiplication of its progeny as well. Who has not observed numerous young thistles surrounding a parent plant, and springing from its root buds, often extending over a radius of several feet? Burdock, the common thistle, and much other noxious growth may be exterminated from a farm by preventing the ripening of seed for a term of years until all of that resulting from the previous slovenly habits of the owner shall have grown and have been annihilated; but not so of the Canada thistle, because of its fatal propensity to propagate beneath the surface.

THE DAIRY.

A SERIOUS MISTAKE.

One of the most serious mistakes dairy-men make in the summer season is in overstocking the pastures and then trying to believe that something can be made from nothing. Milk is the product of food that results from over-plus feeding. The animal must first support life, and then the balance of the food not so required is diverted to other functions. Milk production in its successful form is the result of extra feeding, and to what extent this may be carried and with what wonderful results, the text of the reports on the great trial milk and butter tests best illustrate.

The summer pasture is a place where forced feeding in one sense should be practiced. It is best found in well-stocked fields, with a solid turf made up of the

best varieties of grasses. In such fields, with abundant and pure water, the cow eats to repletion, and just in proportion as the food is assimilated and properly distributed, so will be the milk yield, provided that a good cow consumes the food.

The labor of finding food also enters into the calculation. The cow that is surrounded with ample, nutritious food will not be obliged to put forth the exertion that another will who has not only to roam over a large territory and at the best finds but short and scanty herbage. Maximum profits can never come from indifferent and restricted rations either in a field or in the stable. The brush pasture is a nuisance, and far better would it be to put one-half in good *repair* and establish a good turf and then pasture it, not to the extreme limit, but so that it shall at all times have abundant food, and let the other grow up wild and try and induce valuable timber to grow upon it. The pasture of fifty acres that only supports fairly six or eight cows could, if cleaned up and farmed, amply keep twenty, and it would be this extra ten cows which would afford the "clear" profit.

CHURNS.

Lightning has been known to bring cream without the use of a churn, but for all ordinary farmers the churn will be used for some time to bring the butter. But there are good and poor churns, the latter in the vast majority. Why cream comes is a mystery. Possibly it is the buttermilk in the cream that *comes* instead of the butter, and the separation leaves the butter globules free to unite. In any case the churn that is the most simple and has the least fixtures about it must be the best, provided that it brings all the butter. The usual beating and slashing noticed in all "three-minute churns" is not in the direction of good butter. It is a gentle, flowing motion that does the perfect work, and to this end the revolving churn is the perfect one, but the careful person will get fine butter from many others, and the dash

churn has stood the shock very well indeed. The perfect churning of all the cream is best promoted in the care of the cream in the cream jar. Cream of different eyes and conditions of acidity all dumped into the churn together and churned at once will not produce butter as completely as cream "all alike" and properly prepared for the churn. A great fault is one of filling a churn too full and therefore gives the churn no chance to agitate the cream. A revolving churn filled full could not perform any service, but churns filled half full, and even less, of cream might prove the "long sought."

There is no absolutely best churn. There are a few better than all the others combined. The best churn is the one that keeps all the cream in motion and yet so gently that there is no grinding out of the butter globules rather than the yellow, granulated lump that tempts the eye and captivates the tongue. Get a good sized churn, fill it not over half full, and find perfection in its workings.

Ohio.

JOHN GOULD.

THE BIGGEST CHEESE EVER MADE.

Yesterday the "City of Buffalo" was built—the mammoth cheese manufactured by the Cloverfield Combination Cheese Factory. By the courtesy of Mr. Hayward a large number of his friends, to the number of six hundred or more, were invited to witness the operation of constructing this mighty creation of curd. On arriving at the factory the party proceeded to inspect several mammoth cheeses already in process of curing, three of which weighed 1,500 pounds and three others 3,000 pounds each. These are part of an order for half a dozen of each size now being filled for Liverpool and London, Eng., where they will be cut up during Christmas week. The firm of Richardson, Beebe & Co., make several of these immense cheeses each year for foreign markets, where their fine quality makes them much in demand. Mr. Hayward informed his guests in a short speech that the Cloverfield Combination included twenty-five factories in Erie and Wyoming counties, mostly in the former, and the Marshfield Combination comprised twenty more, all in Erie county and under the supervision of Mr. Beebe,

and that these factories used the milk of 10,000 cows, and the money value of their total output last year was \$520,000. This showed, said Mr. Hayward, something of the magnitude of the dairy interests of Erie county. Richardson, Beebe & Co. sell on an average of from 1,800 to 2,600 boxes per week, the cheese bringing in the market about a half cent more than the highest market price paid in New York. The particular cheese which the guests were called together to see pressed would weigh 3,300 pounds and would be the largest ever made, the largest one on record being one of 3,100 pounds made in 1871 for Mr. Hayward. Mr. Richardson, however, wished to surpass this weight, and accordingly the "City of Buffalo" would be made four inches thicker than its ton-and-a-half comrades. Into the composition of this cheese entered the milk of 2,600 cows, which had taken the hands of 300 dairymaids to milk. The milk weighed 32,000 pounds, equivalent to sixteen tons, or 4,000 gallons. As it takes about thirty days to properly cure a cheese, it will not be delivered before November.—*From the Buffalo Express.*

Prof. Law, of Cornell University, caused some cows to drink for several days from a stagnant pool of water that existed in a swale and then examined the milk and found it full of living organisms. Then the water from the pool was examined and the same little living germs were found. Then the cows were examined, and they were found to be in a feverish condition, the result of their blood being charged with this living animalcule. Then some pure milk was taken and some of this pond water put with it, and these same germs multiplied within a few hours so as to take full possession of the milk.

After this test no one can dispute that living organisms may be introduced into milk by the using of improper foods and drinks. It also shows that there is a close relation between good, pure water and fine and good-keeping dairy products. From a sanitary standpoint, the lives and health of consumers are to a certain extent de-

pendent upon the character of butter and milk. Radical cleanliness can only be tolerated in the dairy of 1885 and will be in the near future imperative.

MEAT AND BUTTER.

THE EIGHTH ANNUAL AMERICAN FAT STOCK AND DAIRY SHOW.

This exhibition has for its object the encouragement of the most economical production of the best quality of meat. The general character of the show is the same as that of the great Smithfield show of London, England, that has been so popular for nearly one hundred years with all classes, and especially with those that consume the highest-priced meat throughout the British Isles and the European continent.

The large premiums offered and the emulation among breeders and feeders attracts in larger numbers each succeeding year to the American Fat Stock and Dairy Show the choicest specimens of the various breeds of meat-producing animals to be found on either continent.

Not the least of the attractions at the forthcoming show will be the large exhibition, from all parts of the country, of butter, cheese, dairy cattle, and utensils used in the manufacture of dairy products. Over three tons (6,000 pounds) of milk will be used each day of the show in the manufacture of butter and cheese in the Exposition Building, and the public will have a grand opportunity of seeing the most approved appliances and methods among the most successful dairymen of the country.

All the railroads with Chicago connections will sell excursion tickets to the show at greatly reduced rates.

Our friends do us a good turn by mentioning the MARYLAND FARMER to their neighbors, and suggesting to them to subscribe for it.

"Fearless" Threshing Machine.

We call the attention of farmers and threshermen to the advertisement of the celebrated "Fearless" Threshing Machine, elsewhere in this paper. Unparalleled honors have been bestowed upon this machine, at fairs and exhibitions, State, National and International. And, as equally good and reliable evidences of superiority have been given, by the highest authority, times without number, persons desiring to purchase will do well to consult the manufacturer of the "FEARLESS," MINARD HARDER, Cobleskill, N. Y.

AMERICAN DAIRY SHOW.

The preparations being made by the officers of the various live stock breeders' associations for their annual meetings in Chicago during the continuance of the American Fat Stock and Dairy Show indicate an unusually large gathering of the prominent live stock men from all portions of the United States and Canada.

The eighth annual American Fat Stock and Dairy Show will be held in the Exposition Building, Chicago, commencing Tuesday, November 10 next, and closing at 10 o'clock P. M., Thursday, November 19. The attendance at the last fat stock show exceeded 100,000, and there is every reason to expect a much larger attendance at the next. The prominent farmers and stock men of the country have made arrangements to hold their annual meetings for this year at Chicago during the fat stock show, at which time and place for years past there has been a grand live stock breeders' rally, representing the most progressive and successful fine stock breeders of America.

SKIM-MILK AND BUTTERMILK FOR PIGS.

Pigs may be fed upon a mixture of skimmed milk, buttermilk and whey, mixed with middlings or bran; but if young pigs, no corn meal should be mixed in, and whey should not be fed to very young pigs, unless one-third pound of linseed meal is mixed with a gallon. If pigs are on a clover pasture, whey, mixed with middlings, may be safely fed, but skimmed milk is better. If lean half-grown shoats are fed, then it is quite safe to feed a large amount of whey, if in good condition. These lean pigs have already grown muscle and bones, and need to lay on fat, and whey will often do this very rapidly. Whey is most profitable to feed to lean shoats, and only requires to be mixed with middlings to reduce the portion of water. As whey is about ninety-three per cent. water, there should be eighteen per cent. of middlings mixed, to reduce the water to seventy-five per cent.

But skimmed milk is well adapted to feeding young pigs, because it is rich in nitrogen to grow the muscles, and in phosphate of lime to grow the bones. Pigs will stretch out rapidly on skimmed milk,

but this is rather too much water, and it is improved by mixing middlings with it. The buttermilk should be fed in smaller quantities than the skimmed milk to the pigs, and is improved if fed with a half pound of oat-meal per day to each pig.

COOKING SCHOOLS.

A very practical step towards improving the condition of the poorer class of people is the establishment of schools, where the girls and women may be taught to cook. Most of them know nothing about it. They do not know either how to buy materials for food, in the most economical manner, nor how to prepare them for the table after they are bought. Not only are they ignorant of the methods of making food palatable, but they have no idea of the processes by which to extract from food material all the nourishment it is capable of affording. Many of them do not know even how to make bread; they depend wholly on the baker, and of course on the cheapest and poorest of the baker's stock. This ignorance on the part of the women aggravates the evils of poverty more, perhaps, than any other one agency. In the first place, it greatly increases the cost of living; it is a well-known fact, that many a person is unable to buy twenty-five cents' worth for twenty-five cents; moreover a poor cook wastes a large portion of her materials. In the second place it tends to increase drunkenness; the lack of palatable and nutritious food produces a low condition of the digestive organs, and to the craving thus created the stimulous of liquor affords a temporary relief. Again, the wife's inability to cook takes away one of the attractions of home, for it is useless to deny that well-prepared food is an attraction, even in the homes of wealth, and in the homes of poverty and ignorance its power is still greater, since the intellectual status of the inmates gives them fewer resources of enjoyment.

Something is being done in different States to bring this instruction within reach of those who so sorely need it, but not enough. Even in the heart of the poorest and most degraded woman the spark of mother-hood is nearly always alive; covered over and quenched, it may be, by the ashes of poverty, and crimes, and misery, but ready to kindle into new life whenever the breath of hope can reach it. To give these

women the power to do something for the comfort of their homes is to give them hope, the one thing humanity cannot do without. The men, too, will take heart, not only from being well fed, but from the satisfaction of finding that the pittance they can earn is enough to make their families comfortable. Just as soon as these people begin to feel that their power to help themselves is increased, the desire to do so will revive, and their salvation from the horrors of want and crime will become not only possible, but probable.—*Ex.*

OUR PARIS LETTER.

PARIS, OCTOBER 3.—M. O. Lecq states that in order to know if sugar beet be fit for lifting divide the neck of a root vertically, but do not pull it up; then horizontally below the spot from whence the leaves spring. Examine one of the moities, to ascertain if the salts are disappearing or have left a hole, currently called "salt cavity;" if so the root is ripe. If the saline matter assumes a reddish tint, becomes dry, spongy and slitting, the root is only in process of maturation; when the salts are very aqueous the root is not ripe.

The determination of the density of juice in the beet-root is a very important matter, as it regulates the price. The roots ought to be selected immediately before sale and delivery made without delay, as some days of rain or dryness can cause the density to vary as much as three-tenths of a degree. Large have less sugar than small roots, so that the samples selected ought to be of average size. Choose fifty fair type roots and out of these decide upon the sample. Clean the roots, trim round the collar, rasp and squeeze perfectly between a piece of linen or a press, as the last juice, like the last milk from the udder, is the richest. When the bubbles of air have subsided and the froth risen to the surface—a space of five minutes—skim it off with a morsel of paper and plunge the densimeter into the liquid, letting it freely float. A good densimeter is necessary and ought to be regulated by a disinterested party. Having noted the density, see that the standard temperature is 60 degrees Fahrenheit.

The Farmer's Book of Grasses, by D. L. Phares, price 25 cents at this office

CIVIL SERVICE ON THE FARM.

We extract the principal part of an article on this subject published by D. D. T. MOORE, in the *American Agriculturist*. It contains a thought that will come home to farmers and gardeners in all parts of our country.

In these days, when so much attention is given to "civil service reform," and the merit system, in filling various offices and clerkships in Governmental departments—National, State, Municipal, etc.—it may be well to enquire whether the rules adopted in these are not applicable, at least to some extent to the engagement of employes in industrial pursuits, and notably to that of the leading occupation of the country, agriculture. It would be a great benefit and blessing, certainly, if a system could be introduced whereby such rural citizens as require more or less help could readily secure sober, civil, industrious and trustworthy assistants. Could some feasible plan be adopted to assure employers in regard to the industrious and steady habits, competency and moral deportment of those they engage for the season, or a longer period, many would be saved much of the disappointment, vexation and damage occasioned by the necessitated employment of men who prove idle, wasteful, intemperate, or otherwise incapable.

How this can best be brought about is a question worthy the well considered action of the employing and laboring classes of ruralists, for both would be benefited by the adoption of the employing and laboring classes of ruralists, for both would be benefited by the adoption of a through reform. While farmers would escape the hindrances and losses which result from the indolence and carelessness of those they sometimes employ—either unwittingly or from necessity—really capable farm hands, known to be industrious, skillful and upright, would have little or no trouble in finding steady employment, at good wages. No progressive husbandman of reputable standing will knowingly or willingly employ a man of idle and dissolute habits—one who is not only careless and neglectful in the discharge of his duties, but whose example, in the use of vulgar and profane language, and disgraceful deportment, must prove injurious to his associates, and especially de-

moralizing to young people. Farmers whose families include children and youth, cannot be too careful in the selection of those they employ, both male and female, as their influence, for either good or evil, is very likely to prove both powerful and permanent.

But how can your suggestions about civil service reform on the farm be carried out (asks the reader) especially in isolated rural neighborhoods, where farmers are often obliged to employ strangers? This is an objection, we admit, but not one which is insurmountable. If farmers, everywhere, will resolve to employ only industrious, skillful and trustworthy men, or the best that can possibly be obtained, and require strangers who apply for work, to present strong recommendations as to character and competency, the difficulty may be measurably overcome. But in order to make this plan practicable, and of benefit to those specially interested, farmers must scrupulously regard each other's interest. For example, no one who desires to do as he would be done by, should recommend, either verbally or in writing, a person that he would not himself employ—a thing which is often done by prominent people of various occupations, either from kindness, or to get rid of applicants. This is a matter about which farmers should be extremely careful, least they do injury to other employers, by influencing them to engage men who prove incompetent, or otherwise objectionable. Whenever feasible, it would be well to organize, or have an understanding about the employment of farm hands, for mutual protection against the impositions of pretended skilled laborers, who are really incapable, if not idle and vicious.

The Ulster Prolific Grape.

We have received from A. J. Caywood & Son, the proprietors of this new grape, a few specimens for examination. It is of the size, color and general appearance of the Iona, with flavor much the same, but with a thicker and tougher skin. This is as near as we could ascertain from the specimens received. They were not in good condition, having sweat very much from close confinement on their journey from Marlboro, Ulster county, N. Y., to us.

EXTRACTS FROM THE DEER CREEK FARMERS' CLUB DISCUSSION.

BARN YARD AND STABLE MANURE.

The October meeting of the Deer Creek Farmers' Club was held at Highlands, the residence of Mr. John Moores, near Bel Air, on Saturday, October 17th. Nearly all of the active members were present.

The topic selected for discussion was "Making and applying barn yard and stable manure."

John Moores said that fifty years ago the most important work on a farm was saving and making manure. Bone dust and phosphate were not used. The waste from the house, the scrapings of the poultry house and everything else was carefully saved and composted. Now everything is wasted. A ton of good stable manure, properly composted, he thought was equal to a ton of fertilizer costing \$30.

Mr. Moores said that last year he made a rail-pen behind his wood-shed, in which all the chips, coal ashes, &c., were placed. He put three barrels without heads or bottoms in the middle and had all the soap-suds and slops poured on the pile, through these barrels. He hauled out from this 20 cart-loads of good fertilizer last spring.

John B. Wysong thought it best to haul out and spread manure on grass as fast as it is made. If you have not stock enough to convert your corn stalks into manure in the barnyard it is better even to haul them out on grass. Land will improve if covered with anything. He had top-dressed wheat with manure with good results. It is better to furnish bedding enough to stock to absorb all the liquid manure than to save it in a liquid form. It is a good plan to make compost to apply to corn in the hill, for corn manure should be applied several years ahead if possible.

R. Harris Archer spoke of the change of views among farmers in regard to the importance of ammonia. A few years ago the value of a fertilizer was thought to depend upon the amount of ammonia it contained. Now ammonia is not regarded as the most important element. South Carolina Rock and Orchilla Guano contain no ammonia, and many people say the results from them are as good as they obtain from high-priced fertilizers. He advised applying barnyard manure to portions of the

farm most distant from the barnyard, because the fields nearest had, perhaps, received more than their share for many years.

Wm. Munnikhuisen said he makes it a rule to cart manure from the stable and spread it at once. He thought manures attracted from the atmosphere more than they lose. Any rough litter thrown upon the ground will cause it to improve. Manure hauled out as soon as made will do more good than in any other way. It will also cover more ground than when composted. Better results are obtained from using commercial fertilizers with barnyard manure than from either alone.

Wm. D. Lee likes to get all his manure, rough and fine, out in the spring, applying it to grass a year or two before putting the field in corn. All the home-made manure possible should be saved. He objected, however, to spreading it upon frozen ground, as much of it washed off.

E. M. Allen did not believe a fine crop of wheat could be raised from stable manure. He regarded it as important to save all the manure that can be saved about a farm, but on a poor farm a man can't produce anything to make manure without commercial fertilizers. He was satisfied that the plowing down of clover is too much neglected. That is the cheapest and best way of improving land. You can't cover great fields with manure, but you can fill in the remainder with clover. Mr. Allen spoke of the relative value of bone dust. Some has 3 or 4 per cent. of ammonia and some 6 or 7 per cent. The latter is worth several dollars per ton more than the former.

Robert W. Holland preferred to apply stable manure two or three years ahead for corn. A little phosphate will also help it. He thought many farmers made a mistake in not plowing down clover for wheat.

Wm. B. Hopkins tries to make all the home-made manure he can and he thought it better to haul it from the stable than to pile it under sheds. He puts manure on sod for corn two or three years ahead, and finds the result better when applied two or three years before plowing. He had not found that manure would make his land too rich for wheat. He prefers bone for grass but phosphate will bring the best wheat.

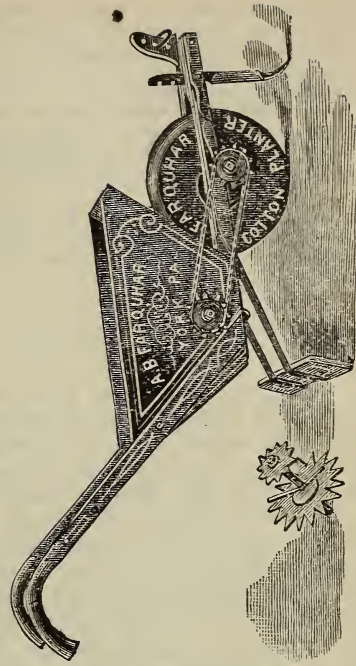
John H. Janey thought Mr. Moore's theory in regard to saving manure is right. If we went around the fence rows and gathered rich soil, composting it with all our manures and bone dust, getting it fine enough to apply it to the soil after the ground is plowed, we would have better results. But this is almost impossible. His practice is to haul out manure on sod, and it is better to apply it two years before plowing than one year. He also thought that plowing down clover is too much neglected. You can scarcely compare bone and phosphate. Phosphate gives immediate returns but bone dust gives a gradual return. He thought there would be permanent improvement from phosphate if more were applied than the crop would take up. It has everything in it that the soil needs except vegetable matter and you can get this by plowing down rye or clover.

Thomas Lochary said his practice is to haul out manure as soon as he can, never saving it for any particular crop. He had had good results from applying it very thinly to wheat directly after it was sown, on the poorest places. They yielded the best wheat he had.

R. John Rogers also thought farmers should save and make all the manure they can at home. He had been applying it, like the rest, on grass. There is, also, a place for good phosphate. For wheat, 300 lbs. of bone, 200 lbs. of good phosphate to the acre, had rarely failed to give satisfactory results. He also spoke in favor of South Carolina rock and said that he had seen no difference in wheat where he used bone and rock as compared with that on which he had applied bone and phosphate.

THERE should be dairy schools attached to most of the agricultural colleges, where girls as well as boys could attend and learn how to make butter and cheese. Why should not the women of the land have a chance to get some of the abundance of information to be had at our agricultural colleges? Surely the women have to work on farms, and hard too.

The MARYLAND FARMER for October appears in a new suit. It is a good agricultural magazine and should be read by all our farmers.—*Advocate*.



THE FARQUHAR IMPROVED COTTON PLANTER.—This planter is probably the most perfect and efficient cotton planter in use. Although it combines the advantages possessed by the other leading planters, it has been simplified to an extent that the most ignorant laborer can successfully operate it, while it drops more regularly than any other in use. The seed need not be rolled. Price \$10.00.

Interesting Newspaper Statistics.

Of the statistics of all the departments of the Census Bureau none is more valuable and interesting than that which collects the data of the press of our country.

There is no better way to judge of the success and prosperity of any section of country than to examine the newspapers published in that section—as they are successful and prosperous, so is the country and neighborhood in which they circulate.

As the reports of the Census Bureau are issued but once in ten years, it can be readily seen that if we were obliged to depend on them alone, we would lose much valuable information and time, and would only receive our information after it had been rendered almost useless by its age. Thanks to private enterprise and capital, however, we are able to keep ourselves posted from year to year on the data of the press

throughout the country. EDWIN ALDEN & Bro.'s *American Newspaper Catalogue* is published each year by that pushing firm of Advertising Agents.

According to this catalogue just published there are in the United States and the British Provinces a total of 16,105 newspapers and periodicals, of which 15,868 are published in the United States and 737 in the British Provinces.

This handsomely bound book of some 1000 pages sent prepaid on receipt of \$1.50. Address Edwin Alden & Bro., New York and Cincinnati, O.

We clip the following from the *Baltimore Evening Times*:

"The death not long ago of John Feast, the well-know horticulturist of this city, recalled to the minds of many old citizens numerous interesting events in the history of his active life. Mr. William Booth, the father of Mr. Washington Booth, who was one of the earliest and most extensive botanists in Baltimore, was his friend, as were also Mr. Richard Cromwell, Colonel Edward Wilkens, General Charles Ridgely, Lloyd N. Rogers, Ross Winans and many of the most prominent fruit-growers of Maryland. Mr. Booth's grounds fronted on Baltimore, near Oregon street, and extended to Pratt street. He had a fine nursery and did an extensive business in fruit trees, which he sold all over the State. Mr. Feast was one of the organizers of the first horticultural society established in Maryland. It was organized in this city on November 20, 1832, with Isaac McKim as president and Henry Thompson and Benjamin I. Cohen, David Hoffman and Robert Sinclair vice presidents. The treasurer was Wm. H. Freeman, corresponding secretary Henry F. Dukehart and J. J. Hitchcock recording secretary; counselors, Charles Carroll Harper, Charles Carroll, of Homewood; Samuel W. Smith, Dr. Julius T. Ducated, George W. Dobbin, Robert Lyon, Jr., Dr. J. I. Cohen, Philip T. Tyson, T. R. Allen, Thos. Edmondson, Dr. James B. Rogers, Dr. John C. S. Monkur, Frederick J. Dugan, Henry Schroeder, J. Waters, Geo. Fitzhugh, Edward Kurtz, Jas. Moore, Wm. G. Thomas and John Feast. The first exhibition of the society was held in the Athenæum building, at the southwest corner of St. Paul and Lexington streets, on the 11th and 12th of June, 1833. The display of fruits, flowers and plants was very fine.

Liberal premiums of solid silverware were awarded the successful competitors. At this time the society had 400 members, who contributed \$5 per year each for premiums and the expenses of the exhibition. This society held annual exhibitions until 1857, when it discontinued. The present Horticultural Society was organized on the 23d of January, 1874, by the election of William T. Walters as president, who declined, and Ezra Whitman was chosen in his place, with the following executive committee: W. D. Brackenridge, John Feast, A. Hoen, Henry Taylor, Louis McLane, George W. Dobbin, Henry James, J. D. Oakland and Andrew Black; secretary, T. C. Dorsey; treasurer, R. W. L. Rasin; corresponding secretary, C. T. Snow. The first exhibition of this society was held in Lehman's Hall in 1874. The fruit-growers of Maryland are largely indebted to Mr. Feast for his early introduction into the State of superior fruit."

ITEMS OF INTEREST.

The stock show at Pendleton, S. C., last month, is considered to have been the finest show of thoroughbreds ever made in the State. A number of herds of Jerseys in splendid condition were among the attractive features of the show. Over three thousand people were on the ground, and congratulatory speeches were made by Gov. Thompson and others. Stock raising is rapidly superseding cotton planting in many counties of South Carolina.

It is predicted that the pineapple crop of Florida will soon be more important than the orange crop. Much of the scrub and palmetto lands of South Florida has been utilized for pineapple cultivation, and all engaged in the growing of this fruit in Brevard and Dade counties are much pleased with the year's yield, and are hopeful of the future.

The Fruit Exchange at Jacksonville has been called upon to suggest a method for the prevention of shipping green oranges to Northern markets, a practice which it is expected will bring the Florida markets into disrepute.

The Gulf, Colorado and Santa Fe Railroad Company, Galveston, Texas, are reported as intending to build a grain elevator, wharves, &c., at a cost of \$500,000, as soon as the necessary permission can be secured from the city.

One of the largest transfers of real estate in Florida was made last month by which Mr. Eichelberger disposed of three groves on Panasoffkee Lake to a syndicate, realizing the price of \$360,000 from the sale of them.

A cottonseed-oil mill is being constructed at Tarboro', N. C. There are now mills at Char-

lotte, Raleigh, Wilmington, Elizabeth City and Tarboro'. All pay well.

It now discovered that the soil of Monroe county, N. C., and round Greensboro' is specially adapted for the production of the finest grades of tobacco.

The cotton mills at Woodberry, N. C., four in number, giving employment to upwards of 20,000 operatives, have commenced work on full time.

It is estimated that between now and December 31 there will be nearly \$50,000 put into new buildings in De Land, Fla.

The hard-shell almond, which was introduced into North Carolina a few years ago, is thriving and becoming abundant.

The peanut crop in North Carolina is said to be a remarkably good one, and promises to be the largest in years.

Nash county, N. C., has 6,000 acres in tobacco.

THE APAIRY.

BEES AND HONEY.

Honey is one of the oldest articles of trade, and was known to commerce probably 4000 years ago. The Bible mentions it along with flour, milk, and butter, as one of the prime necessities of life. Samson found it wild in an odd enough sort of a hive, (see Judges 14th chapter,) and it was a part of the present that Israel sent into Egypt to his long lost Joseph. See Genesis 43. It was an article of trade in Phoenicia long before the time of Christ, as we may see in Ezekial 27, 17. It is frequently spoken of by David and other of the Old Testament writers, and Sirach alludes to it. Bees have accompanied the white man wherever he has gone, and the literature of Bee-ology would constitute a library of very respectable size.

Huber wove around the study and management of bees a thread of almost romantic interest, and in our own country very much has been added to the literature of the subject within the last fifty or seventy-five years. Langstroth did more, perhaps, with his common-sense hive, to make apiculture profitable than any one before or since his time. Men have got down to the root of the matter, and some have gone so far as to cook it, till it looks as if we ought by this time to know something about the proper management of bees and manipulation of honey.

Yet, despite all the so called scientific knowledge of bees and skill with which they are managed now, we probably know as little of them to-day as did those old Shemitic races. We are not among those who conclude that the ancients knew nothing of the true scientific principles underlying the various branches of rural art. If David had his superintendent of the fields, of the vineyards, of the stock, and of the fruit and forest trees, (see 1st Chron. 27) they were doubtless among the wisest and best informed of his men, and it does not call for a great stretch of the imagination to suppose that they were pretty fair naturalists, as well as men of practical common sense. No doubt there were bee-keepers among them, and it may have been that it was while among the hives and watching these people at their work, that Solomon caught the inspiration that made him a naturalist (see 1st Kings 4: 30-34). We are perhaps only recovering the knowledge lost with them, and it may be some years yet before we equal them in the extent of our practical art.

Yet this does not detract in the least from the merit of modern invention and discovery. Great credit is due to those apiculturists who are laboring so zealously to simplify the art and make it pecuniarily profitable. Much has been done, more remains to be done. Bee culture is yet only in its infancy. Large areas of the best foraging ground for bees are yet without the semblance of an apiary. Every homestead in the land would support ten to fifty colonies. Every farmer's family might have all the honey they could consume, and some to spare. With the late appliances for handling the bees, any one, a woman or a boy, can manage them successfully. The cost is little, the profit sometimes great. It suits those not incapacitated for hard labor. Try it.

Va.

B. W. J.

The MARYLAND FARMER for October appears in an entire new dress of type and presents a very attractive appearance. It is one of the best of our agricultural exchanges and fully merits the success it has met with. Its accomplished editor, Mr. Ezra Whitman, is well known to hundreds of Baltimore county people.—*Baltimore County Union*.

LIVE STOCK REGISTER.

THE BREEDING OF HORSES.

It would seem that we ought to be done with the importation of farm stock. Very few hogs are now imported, and the most popular breeds, in the pork-producing section at least, are those which may truly be called American. The importation of Short-horn cattle has dwindled down to small dimensions, and English breeders not infrequently come to this country for additions to their herds. We have as good Jerseys in this country as can be found on the Island of Jersey, and the importation of these cattle would amount to practically nothing were our home production of them sufficient to supply the demand. Of some of the newer breeds of cattle the importation will be quite heavy for some years to come; but this is because the number of such cattle in this country is quite small and their increase is insufficient for the demand. Of sheep, we import very few. Among sheep, cattle and swine, it is only the breeds of recent introduction from which importations are made, and we have many breeds which have been bred to such excellence in this country and for so long that there is no need of our going abroad to get first-class animals or to supply the home demand. But, strange as it is, this is not the case among horses. Although the horse is the farm animal of the greatest value, intelligence and utility, we have done far more for poultry even than for horses. We are almost altogether dependent upon importations from France, England and Scotland for horses to produce heavy draft or heavy farm horses here, and while we have done better in the breeding and rearing of carriage and speed than of heavy horses, we have not such race or roadster horses that we can be justly satisfied without importing from other countries. Kentucky has long been famous for its speed and Pennsylvania for its heavy

horses, but neither can boast of as good as may be found abroad, and these two States have very few good horses compared with the number now in the Union.

Under the circumstances, an unusual interest and activity in the breeding of horses is to be desired and encouraged. We have had sufficient time to rear enough good horses to supply all our wants, and to be compelled to go abroad for horses shows that we have been neglectful of our highest interests. There is no reason why we should not rear as good horses as are to be found anywhere upon the globe. It is known to every intelligent horseman that the soil, climate and pursuits of the people determine the character of the horses of a country. We have the soil and the climate, and our pursuits are calculated to produce the finest work-horses in the world, whether that work is to draw the heavy dray, the plow or the gig. If we have not such horses as we ought to have, it is simply because we have not tried to rear them.

At present no branch of stock-raising offers greater remuneration than the rearing of good horses. Cattle, swine and sheep are low in price. The prices of these animals have fallen in sympathy with the prices of other articles, and they have sunk comparatively as low as any. Yet the prices for good horses have very nearly held their own, and the result is that to-day horses as compared with other farm stock, bring the highest prices, and there can be no doubt that those prices yield a good profit. See the Western markets. Good draft or carriage horses are quoted regularly at from \$175 to \$250 each, and well-matched draft teams are sold for \$700 or \$800, and carriage teams for yet higher figures. These horses cannot be otherwise than profitable; and it is just such horses—the best—that yield the big profits. While horse-rearing can be made highly profitable there is very little, if any, clear profit in raising inferior animals.

It would seem that the proper course is to use imported or the very best of the home-grown stallions upon good native mares. The mares have good constitutions and the valuable quality of hardiness, but they lack the size and strength necessary to good draft animals, and the action and speed necessary to good roadsters. To produce the draft horse we must use a Norman, Clydesdale or English shire horse upon the common mares; or to produce the carriage horse, use one of the active, speedy stallions to be had here or abroad. It might be better to use imported mares; but we will make good and sure progress if each year we use the best mares we have and the best stallions we can get. We have fallen behind other branches of stock-raising in the breeding of horses; and if we catch up, as we certainly should, we must use only the best stallions at least, and take advantage of every point in breeding. And if we do this before fifty years we will be sending horses abroad instead of sending money to other countries for them.

HOW TO TAKE OFF A HIDE.

The hides of farm-slaughtered animals have a poor reputation, because of the careless way in which they are stripped. Calfskins and sheep-pelts are reduced one-half in value by being cut and gashed and improperly stretched. When a hide is stripped off it should be stretched at once, and pegged out to dry, with the flesh side upward. If it is rolled up, thrown into a heap and left to dry in that shape, it is so mean looking that a buyer will offer only half its real value. A few hints in regard to taking off a hide may be useful. The throat should never be slit cross-wise, either in killing or taking of a hide. The skin is slit from the chin down the brisket, in a straight line to the tail; it is then cut around each hoof; the hind legs are slit behind over the gambrel, but the front legs are slit up in front, over the knee. This leaves the skin in good shape for finishing the leather. The head and legs are first carefully skinned, and all cutting the skin is avoided. The skin is then easily drawn

off by taking hold of it firmly and pulling it steadily. It is then spread out evenly on the floor, and salted with fine salt. If there is but one it is best to stake it out as soon as the salt has taken, and dry at once in a cool, shaded place. If there are more than one, they are laid upon each other and salted quite freely, and afterwards they are thoroughly dried. If the skins are to be kept on hand, they should be closely watched for moths or grubs.—*American Agriculturist*.

WARM SHELTER IS CHEAPER THAN FEED.

Of the various ways through which it is possible for the average dairyman to enhance his profit, the most effectual is first to reduce the cost of producing his milk. This he can do in a variety of ways. One way of doing so lies in the improvement of his milking stock. This is a certain but slow way, and must be the work of a few years. And then another way, more rapid, and that can at once be made available, consists of reducing the cost of keeping his cows. This, again, he may do in different ways, first by securing greater warmth and more comfort for his cows in winter. The heaviest item of expense which he incurs consists in watering his cows, and the more they are exposed to the cold the heavier that item becomes. Cows eat more in winter than at any other time, simply because more heat is absorbed from their bodies by the cold air. For instance, we all know that hot water will cool faster on a cold day than on a warm one. Therefore the animal heat must be kept up to an uniform standard, and the extra loss of warmth must be restored, by more fuel in the form of feed; and this increases the cost of keeping and the cost of producing the fall and winter supply of milk. Keep the cows warm, and they will eat no more in the winter than any other time, and they will require less extra food for winter, just in proportion as they are made warm and comfortable; and by just so much they will turn out milk at a reduced expense. There is profit in keeping cows warm in winter. It costs much less to tone down the cold of our severe climate by providing warm, comfortable buildings for the cows. If the owner has not secured them already, the sooner he gets them the better, and not be

furnishing extra food year after year to restore the heat needlessly lost by the exposure of his cows to the cold air.—*Nat. Stockman.*

PARIS LETTER No. 2.

There is no country in the world where horses are more ill-treated and so rapidly used up as in France, and perhaps there is no realm where the animal is so much in demand. The horse is the indispensable agent of agriculture and his strength is on a par with his patience and docility. Yet the recompense for these fine qualities is ill-treatment. The animal is abandoned the greater part of the time to heartless and ignorant servants, thus ruining the animal's intelligence, causing it to be vicious, aye dangerous. Alteration in its health follows, it is worn out before its time, while the horse well cared for, but above all, well treated, becomes a source of gain to its owner.

The fact is the French, unlike the English and Americans, have no passion for horses. Horse exercise is not a feature in their social life. The horse is but viewed as a machine for making money or employed for army purposes. It is this passion with the Anglo-Saxon race for all that appertains to the horse which explains their success in breeding them. French farmers do not love horses, and the aim of the government has been to keep up a class of horses for the cavalry. Hence, why the best riding and driving horses were and are ever sought in England.

In the case of Percheron or other horses, the true type of beauty is utility; it is in forgetting this criterion that grave errors have been committed respecting the selection of them. A good horse can only be the product of a good sire and a good dam, and the qualities they embody will be communicated to the progeny. This is the sense in which blood means breed. The entire science of breeding is to be able to trace back for at least a couple of scores of generations the operation of the principle that like produces like. Speed and endurance must be sought in parents possessing these traits. In addition to good blood, sound and robust health are essential. Abd-el-Kader rightly remarked of the Arab horse, "it is the result of the necessi-

ties of the rider." This is equivalent to repeating that beauty is utility. Further, in the choice of a stallion the end ought not to be to find one excellent in some respects and defective in others, but to secure one inheriting no radical drawbacks. Seek in brood animals such conformation in the specialty of the service for which they are destined.

The errors of French farmers, and of others also, is to breed from disqualified mares; any done-up dam with them will do. Now it is useless expecting good progeny from a mother which is delicate or aged. In farm horses density of body or bulk, like the picturesque London dray horse, is not the chief good, for an animal draws not altogether by its weight but by its muscles and nervous energy combined. Hence, a slanting will prove more suited than an upright shoulder for the collar. These points will also be found associated with freedom and surety of step. Climate has much to do also with the breeding of horses. The wiry leg and light body of the Arab horse, the development of muscle and tendon, are associated with dry air. All this may be true, as the horse is originally a native of a dry climate. But the great desideratum for the horse is protection from humidity and securing uniformity of temperature. The Arabs prefer the horse of the mountain to that of the plain, and the latter to the horse of wet lands.

SALE OF JERSEY CATTLE.

Gen. John Gill's Jersey cattle, registered stock, which he kept at Kenwood farm, in Baltimore county, were sold at Kearney's stables last month by Messrs. Matthews & Kirkland, auctioneers. Among the buyers were Messrs. Henry King, M. O. Shriver, Albert Jones, G. S. Watts, M. Robinson, Jr., George Gray, Robert Moore, J. F. McCabe, Wallace King, David Wilson, Dr. J. Pembroke Thom and Charles D. Fisher. The prices were fair, the total amount realized being about \$3,700. The highest price was brought by Philidor's Lilly, which was sold to Mr. McCabe for \$310. Thrush was sold to Mr. M. Robinson, Jr., for \$195; Quiesse to Dr. Thom for \$170; Stella to Dr. Thom for the same amount; Witch Hazel, bred by S. M. Shoemaker, to Mr. Fisher for \$180; Ida Kenwood to Mr. Moore for \$220; Convent Lass to Mr. Wil-

son for \$190; Truth Hazel, bred at Kenwood, to Robert Moore for \$100.

HORSE SENSE.

Dr. Horne says: "Never buy a horse with a low, narrow forehead. Such a forehead belongs to all vicious horses, kickers, bad runaways, etc.—in fact, every vice is found in a horse with a low, narrow forehead, and never in the opposite. In the high and broad forehead we have a predominating cerebellum or low brain. Never buy such horses on any account.

Suspending a sack (or anything else) behind a horse to prevent kicking is worse than ridiculous. Such an act is quite contrary to the commonest grooming, and in every point illogical. I have seen a basket tried instead of a sack. It ruined the animal. There is no education or training in such a foolhardy act.

Nothing is more true than the fact that the kind of bit used on a horse has very much to do with his conduct. Many horses will be fretful and unsteady with a chafing sharp bit that would otherwise be gentle and pleasant with a less severe one. A sharp, severe bit is not the subduer of the horse's temper by any means. It does quite often excite many bad habits and unpleasant acts in a horse which would be dormant if otherwise treated.

No horse requires so good and thorough a breaking as the family horse. A good family horse is one of the most valuable in the horse market at all times. Much of the family's comfort and safety depends upon the qualities of the family horse. None but a thoroughly broken, good tempered animal should be used for a family horse.

There is no question in my mind as to the correctness of the assertion that a medium-sized horse is in every respect the best for the farmer. He will do more work and last longer, and can be used occasionally for a roadster without injury.

A habitually rolling horse should have either a loose box or a narrow stall. A horse in a box stall would not be much better off than in an ordinary stall, if tied. He should be loose. All horses in box stalls should be loose, as the name of the box stall suggests this."

The MARYLAND FARMER for October, appears in an entire new dress of type, and presents a most attractive appearance. It is the oldest and best agricultural journal that comes to our office, and is a most welcome monthly visitor. Mr. Ezra Whitman, its editor, has lost none of the vigor of youth in the conduct of his journal, and, although his locks may be frosted with the snows of many winters, his heart is yet full of those warm and fresh impulses which are not only felt by all who meet him, but are reflected in the columns of the FARMER. —*Marlboro Gazette.*

THE FAIRS.

The week ending Oct. 17, saw several important agricultural Fairs in full tide of success. The Frederick Fair and the Harford County Fair were thronged with visitors, each claiming that fully 15,000 were on the ground at one time; some estimating that 20,000 were present at Belair on one day. It is also reported that the gamblers had full swing at Belair, and the side shows were particularly objectionable. We observe that both of these Fairs were not fully represented in the live stock departments, partly from the fear of pleuro pneumonia and hog cholera no doubt. But the stock included many very fine specimens; and the races attracted the usual amount of the betting fraternity, who won or lost, and in either case were no doubt well satisfied.

The remaining parts of the exhibitions were full, and attracted much attention and met the warm encomiums of visitors. These Fairs are especially valuable in storing up the current of the farmers life, and keeping him from stagnation in thought, in breaking up the dull routine of his work, and infusing into his practice new methods of employment; the outcome of newly acquired ideas. It is hardly possible to expect that they will be wholly unobjectionable in all particulars; but they might be greatly improved and become more useful, more beneficial than they are now.

The Shenandoah Valley Fair was also largely attended, and might very appropriately have been placed with the others over the same general remarks. In each case the list of premiums was so very large as to preclude any possibility of a record in our journal.

The Washington County Fair and the State Fair, combined, held at Hagerstown during the week ending Oct. 24, besides being a larger and more successful Fair in point of attendance, was also noted for some very fine stock, and a good display of all agricultural productions, and implements. But for one thing it seems to have been famous, viz: For "blacklegs" and "pickpockets." The long list of sufferers from pickpockets is so extensive, that we are unable to give space for their names. Some lost as high as \$2,000 by them, and many from \$20 to \$100. We are not at all surprised, when we consider that the managers of agricultural fairs in the past have been studiously educating this class of people to prey upon their fellows. For a long time we have been warning our agricultural friends that by selling licenses to gambling booths, they were encouraging the whole fraternity of gamblers and thieves to be present on the Fair grounds, and rendering it very undesirable, if not dangerous, for the farming community to attend their fairs, and especially so with their families. It is not at all strange that as many as 24 pocketbooks, rifled of their contents, were picked up after the departure of a single train loaded with passengers from the fair. So long as you continue to educate gamblers and encourage the children and young men to gamble at your fairs you will always have plenty of the thieving class to buy licenses for their indecent shows and for the privileges to carry on their gambling operations.

VINEGAR.

We are permitted to print the following chapter on vinegar from a volume we hope to see in print soon, by our occasional correspondent, A. P. Sharp, with whom some of our readers are familiar. The work will embrace many chapters on the different subjects connected with agriculture; and coming from one who is familiar with chemistry, we trust the volume will prove an interesting one.

Among the articles necessary to make up the comforts of the house good vinegar is one, and as the process of keeping a full supply on hand is a simple one, I have devoted a short chapter to it. The foundation of vinegar, like that of all other organic acids and compounds is sugar; and this is what I propose using to keep up a supply of vinegar, as I have done for many years. Commencing with a barrel of good cider, made from ripe and sound apples, having their full supply of sugar, I divide it into two barrels, so as to present a large surface for the air to oxidize the sugar, and I cover the bung holes with gauze. The chemical change soon commences and the sweetness begins to develop into sourness. When the sugar has all passed to acetic acid and the vinegar is fit for use, a family supply is drawn, and an equal supply of sweetened water is added. This sweetened water is made by dissolving one pound of sugar in a gallon of water. The next supply is taken from the other barrel and the same operation continued as with the first barrel, adding the sweetened water. Following this up a full supply of strong vinegar is kept up for years: the sugar in due time being oxidized into acetic acid. In making what some people call cider, I have seen half rotten and green apples used; and after keeping for months no sign of strong vinegar appears. Cider made from such material will never make vinegar, for the simple reason that no sugar is in it. The insoluble starch of the green apple does not follow the juice and in the rotten ones it has all been destroyed in the rotting process. To secure a good starting point the reader will see the importance of ripe sound apples, and the certainty that the sugar is present, also that no pump or convenient spring has been used in conjunc-

tion with the press. A Baume hydrometer for syrup will prove a simple instrument to test the weight of the cider. Sugar being heavier than water the floating of the hydrometer indicates the specific gravity, which should at least show four to five degrees in the stem. From watered cider, or, when pressed from imperfect fruit, no good vinegar can ever be made. The destruction of pickles is often attributed to the vinegar being too strong: Set it down as a fact that good strong vinegar will never destroy or eat up pickles. It is the weak vinegar, which is further diluted by the large per centage of water in the vegetables, so that in time the rotting fermentation sets in, followed by the destruction of the pickles. Often vinegar eels are seen in vinegar; this is an indication of the decay or rotting of the vinegar. They are never found in good strong vinegar. Add a good strong vinegar to vinegar with eels and it quickly destroys them. The conversion of the sugar into vinegar is due to what is known as a vinegar plant, and not to any animal. By following the above directions the plant is kept active and ready to transform the sugar. The following composition of sugar will show the change: Sugar is composed of 72 parts carbon, 11 parts hydrogen, 88 parts of oxygen; and vinegar, or acetic acid, has 24 parts carbon, 3 parts hydrogen and 24 parts oxygen. It will be seen like humic acid there is a gain of carbon. Reader, never lose sight of carbon; it is the agent of the sun to keep up life and motion.

As cider has almost ceased to be the medium for making vinegar, it may interest the reader to know how much cheaper it can be made by another process; especially since the Government has permitted manufacturers to use alcohol, or whiskey, free of all tax, provided they use no worm for condensing the vapor of alcohol. In theory a bushel of corn ought to make about thirty gallons of good vinegar; in practice, at least twenty-five. By the malting of corn, or by the use of diastase, the starch of corn is converted into sugar, and by the fermenting of the sugar it is converted into alcohol, or the base of whiskey; and this is the process used by vinegar manufacturers on their road to vinegar. Instead of having a worm to concentrate the vapor from the still, it is conveyed directly into

cold water, and when the water has condensed enough of the alcohol to form vinegar, the mixture is transferred to the oxidizing tubes and vinegar is made. This has long been known as the quick, or German process. This vinegar is, without doubt, just as good for all practical purposes as cider vinegar, but it can never have the peculiar, pleasant, aromatic taste and smell of good sound apple vinegar. Twenty-four to forty-eight hours is the usual time consumed in making strong vinegar by this process; hence it will be seen why this vinegar has driven from the market cider vinegar. As this is the season for ripe apples there is no reason why the farmer should not utilize his apples and have a harvest of good cider vinegar. Even if it cannot be sold in competition with the quick and cheaper process vinegar. While on the subject of vinegar it may be of interest to state that vinegar for table use is now being made by another process. Several months ago an old friend, Dr. E. K. Squibb, of Brooklyn, New York, was kind enough to send me specimens of the vinegar from the crudest form to the pure table vinegar, and the quality of the latter surprised me, never thinking it was possible to make such pleasant vinegar from hickory, oak and maple and other hard woods. The Dr. in a letter accompanying the specimens explained to me the whole process, commencing with the plain blocks of hard wood, and ending with the partly carbonized wood remaining in the retorts. This process may be called the medium combustion, as repeated in the chapter on combustion. The carbonized wood makes superior kindling wood and is sold by him for this purpose. Carbon is useful in every form, from the brilliant cut diamond to anthracite and charcoal, all carbon.

Good vinegar, fit for pickling ought to neutralize 30 grains of Bi. carb Soda. I have seen vinegar made from cider that would not neutralize half as much.

Rock Hall.

A. P. S.

MILKMAN.—“Johnny, did you put water in the milk this morning?”

New Assistant.—“Yes, sir.”

“Don't you know that is wicked, Johnny?”

“But you told me to mix water with the milk.”

"Yes, but I told you to put the water in first and pour the milk into it. Then, you see, we can tell people we never put water in our milk."

THE NEW YORK HORSE SHOW.

The great National Horse Show which will open in Madison Square Garden in the city of New York on the 3d of November, promises to exceed in attractiveness all former exhibitions of the kind. The entries have closed and number 412 horses. Last year there were 381. The managers say that the quality of this year's entries is better, and there are more noted horses. The exhibits of trotters will be the largest ever got together. There is a large number of entries in the stallion classes, mares, matched pairs, fillies, brood mares with foals and coaching stallions.

An interesting feature of the display will be five Trakhene stallions imported from Germany by Antony & Rusk. As is well known to horse breeders, this strain produces the best cavalry horses in the world. The name is taken from that of the imperial German farm in eastern Prussia. The stallions to be exhibited are Papst, a sorrel, sired by Paladin, one of the Emperor William's finest stallions; Leporello, a black, winner of the first prize at the last Hamburg show; Peto, a bay; Pandur, a sorrel, sired by an English horse that cost the Prussian government \$40,000, and Lenz, a dapple bay, valued at \$5000.

FARMERS' MEETING.

The Wicomico farmers' of the upper part of the Eighth district (Nutters') held a meeting at Morris' School House, on Wednesday evening for the purpose of organizing a farmers' club in that part of the county. The meeting was addressed by Hon. L. Malone, upon the following subjects: "How to save liquid manures," "how to break up noxious weeds and plants," "what manures are most valuable." At the conclusion of Mr. Malone's address; Mr. J. L. Morris and J. H. Trader made short but pointed remarks upon the subject of drainage, fertilizers, stock raising, etc.

The meeting was well attended and the audience were highly pleased with the opening of a series of efforts to improve the

system of farming in the county. The meeting, we understand, is to be followed by others in all parts of the county. Much good will result from the farmers taking an interest in these meetings.—*Record*.

POULTRY HOUSE.

CHAPTERS ON CHICKENS.

BY EXPERIENCE.

CHAPTER XI.

SPECIAL CARE.

1. Take a good poultry journal and keep up with the times: Not by adopting every new theory, or espousing every new method of management; but by keeping posted on all these subjects.

2. Do not discard your own stock for every newly named breed which is highly praised. Never suppose that other poultrymen have better fowls and are more successful than yourself, unless you have positive proof of this fact.

3. Watch your flock closely and see that everything about your premises is in order, and that all parts of the system of management you have adopted is carried out to the letter.

4. Talk freely with all chicken raisers and learn all you can. Write down what you learn, or otherwise impress it upon your memory, but do not take for granted all that you read or hear.

5. See that your chicken houses are in order. The roof tight, the boards not dropping off, none of the window glass broken, the doors in good working order, the dust bin properly arranged and cared for, the shell and gravel box well filled, the roosts perfectly clean, the nests fresh and sweet, the droppings properly removed.

6. If you have yards for your flocks see that the fences are in perfect repair, that you have plenty of leaves in their winter quarters, that the provision for watering the flock is good, that you have facilities for feeding the different kinds of food.

7. Every morning examine the premises for signs of unwelcome visitors, such as dogs, cats, rats, weasels, &c., &c. If discovered take immediate steps to destroy them.

8. Locks are very cheap, and when placed on a chicken house, or on the gate of a yard, they are very seldom broken. Thieves are generally careful not to enter any place secured by a lock; for danger generally lurks behind a locked door.

9. The moulting season will make your birds droop and look languid. Give some stimulant in food and water—Cayenne or black pepper—especially in September and October, after moulting. Sulphur in their mash is good for them; and Onions, chopped up very fine, and fed raw in their cooked mash are excellent.

10. Separate diseased chickens from your flock immediately. If valuable birds, doctor and cure; otherwise I have found it best to kill and bury them. With chickens as in other cases, I have found prevention better than cure; use therefore all sanitary precautions. The most common diseases are: colds, with accompanying sneezing; roup, cholera. Learn the best remedies for these, and apply promptly.

11. If by accident a chicken is injured, gets leg or wing broken kill at once and eat it. Have your chickens fed well enough to be always in good condition, but never fat.

12. Corn is very fattening for poultry; therefore feed with it wheat and oats, as you wish to feed all they will eat clean. Wheat is said to give the best result in eggs. Make your feed in winter as near the summer feed as possible including the green and insect food of summer.

13. The best time to obtain your stock is in the autumn, October and November. Pick out such as you wish carefully; get birds heavy enough, not to be likely to fly a six foot fence. Then give them this especial care.

Experiments tried prove that poultry fed on ensilage, with a sufficient quantity of grain, will do better in every particular than when fed in the old way on grains, at one-fourth the cost, or at a saving of about 75 per cent. One hundred fowls, take them as they run, large and small, will cost, to feed them one year, about \$100. To feed the same on ensilage and the required quantity of grain would cost not to exceed \$25. Ensilage alone is self sustaining; the poultry will do well and lay well. To feed on ensilage alone would cost about \$14; and to add to this shorts, corn meal, buckwheat mixed with ensilage, occasionally scraps, plenty of gravel, ashes, etc., they will do better than by any known way of feeding. One hundred fowls should produce, at a low estimate, 833 dozen eggs in one year, besides laying eggs to set about thirty hens. These eggs, at twenty cents per dozen, would equal \$166.60, and by fair success should raise 150 chickens. The reason I discuss this subject, poultry, is to show that hundreds of mechanics, laborers, etc., who are owners of a small house, with an acre or two of land, and planting it to corn or ensilage, can raise twenty-five tons to the acre; average cost would be about \$2 per ton in the silo; can build a small silo not to cost over \$25 to \$40, and less than that if they can do the work themselves; fill this silo with the ensilage. You can keep a cow the year around on ten or twelve tons of ensilage, or, if fed with some hay or grain, less ensilage. With the ballance of the twenty-five tons you can keep from 150 to 200 fowls.

Practical experiments prove these results; and, for a small investment. I know of no investment that will surely bring as good results.

ENSILAGE FOR POULTRY.

When ensilage is fed to poultry they not only eat it greedily, but it makes them smart and active, have a healthy look, and fine, bright plumage, which is a sure indication of good health. During the winter season, ensilage, when fed to poultry, mixing with it a proportional part of shorts or corn meal, will increase the laying of eggs, and fatten them very readily. As ensilage and corn meal fatten cattle, so with poultry, they lay on fat very readily.

Meeting of Old Friends.

Last month Col. R. M. Hoe, the senior member of the famous Hoe press manufacturing firm of New York, came to Baltimore and paid a visit to his old friend, Mr. A. S. Abell, of the *Sun*, at the latter's country seat, Guilford, in Baltimore county. Both having borne an active part for a half century in the work of a period remarkable for its progress in every field of endeavor, and, while retaining fully their interest and individuality in current movements, having exceeded the three-score and ten

years that commonly mark the limit of vigorous old age, their meeting possesses a more than personal interest. The fifty years of their friendship and business activity embraces changes, industrial, political and social, that constitute a veritable revolution in the conditions of existence as they first knew them.

THANKS to the Illinois State Board of Agriculture for complimentary tickets to the American Fat Stock and Dairy Show, at the Exposition building Chicago, Nov. 10th to 19th, 1885, also Complimentary tickets to the Grand Opening, Tuesday evening Nov. 10th.

DOMESTIC RECIPES,

CHARLOTTE PUDDING.

Remove the crust from a loaf of bread, dip the slices in milk and spread with butter. Pare and cut apples very thin. Lay the bread in a buttered dish, spread over it the apples, sweeten and flavor with the juice and grated rind of a lemon. Bake until the apples are tender.

PLAIN PUDDING SAUCE.

Half a cupful of butter, one cupful of white sugar; beat together very light; flavor to taste. Fifteen minutes before serving, set the bowl in a pan of hot water on the range, and stir until hot. It will raise in a white foam to the top of the bowl.

APPLE OMELET.

Six large apples, two ounces of butter, four ounces of sugar, three eggs, two tablespoonfuls of cream. Boil, mash and strain the apples, stir in the butter and sugar, working until entirely smooth and cold; add the eggs, beaten as light as possible, with the cream, and whip all well together. Warm a baking dish, butter the sides and bottom, and sprinkle with bread crumbs; pour in the omelet, bake in a moderate oven, sprinkle with powdered sugar and serve immediately.

CRULLERS.

Five eggs, half a cupful of sugar. Beat well together and add one teaspoonful of cream or milk. A piece of butter as large as two eggs, half a teaspoonful of soda, two

teaspoonful of cream tartar. A little cinnamon or nutmeg. Flour sufficient to make a dough that will roll out. Fry in hot lard.

BOOKS, CATALOGUES, &c., RECEIVED.

First number of "Country Homes" received. May it prosper. We remember Asheville, N. C. as a prosperous and thriving town, with a good future before it, and that region of country should support well a paper so well gotten up and with such evident enterprise.

We have just received a copy of No. 23 of "Ogilvie's Popular Reading," containing six stories complete, printed in large type, with handsome colored lithograph cover. J. S. Ogilvie & Co., 31 Rose Street, New York.

We have received an interesting book under the title of "Heads and Faces" and as the subject of which it treats is one that many take much interest in we can from a perusal of the work recommend it to our readers, as containing much matter and illustration that will interest and amuse them. Published by Fowler & Wells Co. 753 Broadway, New York. For sale in our city by Cushings & Bailly, price 40 cents, to whom we are indebted for copy received.

We have read with a great deal of enjoyment "Driven Back to Eden," one of the latest stories by E. P. Roe. The experiences of the family in the city flat are not too highly colored by any means, and those of the country are just such as are liable to come to any one who purchases understandingly in the country. With the property can always be had innumerable conveniences as part of the sale, and Mr. Roe only suggested this fact in the few he found for his city family. The book will have a healthful influence, and it would be a blessing to hundreds of families to be in like manner "Driven Back to Eden." Dodd, Mead & Co., publishers. For sale by Cushings & Bailey, Baltimore.

Protecting Roses in Winter.

In the Northern regions, lay down the Rose bushes' and cover with evergreen boughs: in places where the common Brake can be had, it is well to collect it, as it makes an excellent protective covering. Old leaves, of course, can be used for the same purpose, and there is nothing better. The difficulty is to get enough of them. First, bend down the Rose shoots and fasten the tops to the ground with a peg, then draw soil up about the base as high as possible, and afterwards cover with whatever material is to be obtained, keeping it in place by poles of sufficient weight to prevent displacement by the wind.—*Vick's Magazine.*

23-Vol.

THE MARYLAND FARMER.

Jany. 1886.

A MONTHLY MAGAZINE, of 32 pages, devoted to Agriculture and kindred subjects.

This is pre-eminently a FAMILY MAGAZINE, first class in every particular: fully up to the times on all subjects affecting the interests of Agriculturists. It has long been acknowledged as standing at the head of Monthly Publications devoted to Agriculture; pure in tone, advocating all improvements which will elevate, refine and benefit pecuniarily and morally the farming community; many of the suggestions in its columns have proved the key note for reforms, adopted by the most influential organizations in our country. It was the first to reduce the price of subscriptions to \$100 per year, and few Magazines of equal extent have been able to follow its example.

It has always proved a remarkably remunerative advertising medium, and has received the patronage of the largest and best firms in the City of Baltimore and elsewhere, who have remained for years in its columns.

A popular monthly magazine like the MARYLAND FARMER is the best medium for advertising. Why? It is always preserved; it is often bound; constantly referred to; is read by its subscribers and many of the subscribers friends. Widely circulated, finely printed, reaching a vast number of the best and most substantial families in the country. Nothing objectionable ever enters its pages, and it probably has a greater number of readers than any similar magazine, its circulation is already large, and constantly increasing. As we draw near our 23d. volume, with our new dress, and many improvements, we shall hope to add many thousands to our list of patrons, throughout all sections of the country but especially in Maryland and the South.

The editor and proprietor has been engaged in the interest of Agriculture for nearly fifty years, and during this length of time has become personally acquainted with most of the prominent agriculturists in the country. Devoting his whole time to fostering this great cause, he earnestly appeals to every subscriber of the MARYLAND FARMER to not only renew his own subscription but invite his friends and neighbors to subscribe. Terms one dollar a year in advance and a premium worth from 30 to 60 cents. Premiums will also be furnished all regular subscribers who renew by January 1886. Our list of premiums will be published in the December number.

EZRA WHITMAN,

EDITOR AND PROPRIETOR.

The oldest Agricultural Journal in Maryland,
and for ten years the only one.



A STANDARD MAGAZINE,

DEVOTED TO

Agriculture, Live Stock and Rural Economy,

Oldest Agricultural Journal in Maryland and
for ten years the only one.

EZRA WHITMAN, Editor and Proprietor.

141 WEST PRATT STREET,
BALTIMORE, MD.

BALTIMORE, NOVEMBER 1st, 1885.

TERMS OF SUBSCRIPTION

One Copy, one year in advance,	\$	1 00
Club Rates, 5 copies one year in advance	- - -	4 00
" " 10 " - - -	- - -	7 50
" " 20 " - - -	- - -	14 00
" " 50 " - - -	- - -	32 50
" " 100 " - - -	- - -	60 00

Subscription Price for One Year, if not paid in advance, will be at the old rate, \$1 50 per year, and positively no deduction.

TERMS OF ADVERTISING

	1 mo.	3 mo.	6 mo.	1 year.
One Square, 10 lines . . .	\$ 1.50	\$ 4.00	\$ 7.00	\$ 12.00
Quarter Page	6.50	15.00	22.50	35.00
Half Page	12.00	25.00	40.00	70.00
One Page	20.00	45.00	75.00	120.00

Special rates for cover pages.

Transient Advertisements payable in advance.

Advertisements to secure insertion in the ensuing month should be sent in by the 20th of the month.

CONTENTS FOR NOVEMBER.

AGRICULTURAL DEPARTMENT.

November Thoughts for Farmers...	323
Restorative Crops.....	324
Cabbage Culture South. Jones.....	324
Management of Agricultural Fairs...	325
Preparing Trees for Winter.....	326
Keeping the Land in Crops.....	326
Painting.....	327
Terrific Force of the Judson Dynamite.	
A. P. S.....	327
Damp Cellars.....	328
Cuban Tobacco Deteriorating.....	328
Agriculture in Georgia.....	329
German Potatoes in N. Y.....	329
A Well Known Class.....	330
Maryland and Delaware Ship Canal.	331
The No-Fence Law.....	332
October Crop Reports.....	333
Farmers and Law Suits.....	333
Editorial Notes...323-324-325-327-331-335	336.

Our Paris Letter.....	338
Civil Service on the Farm.....	339
Deer Creek Farmers' Club.....	350
Farquhar's Cotton Planter.....	341
The Fairs.....	347
Vinegar. A. P. S.....	348

POULTRY HOUSE.

Chapters on Chickens.....	350
Ensilage for Poultry.....	351

THE DAIRY.

A Serious Mistake.....	335
Churns.....	335
Biggest Cheese ever Made.....	336
American Dairy Show.....	337

THE APIARY.

Bees and Honey. B. W. J.....	343
------------------------------	-----

LIVE STOCK REGISTER.

The Breeding of Horses.....	344
How to Take off a Hide.....	345
Warm Shelter is Cheaper than Feed.	345
Paris Letter No. 2.....	346
Horse Sense.....	347
DOMESTIC RECIPES.....	352
BOOKS, CATALOGUES, ETC., RECEIVED.....	352
PROSPECTUS.....	354